

November 1942

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CONSUMERS' RESEARCH



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CONSUMERS' RESEARCH



Vol. 11 • No. 2

BULLETIN

November 1942

Off the Editor's Chest

THE CUPBOARDS of U.S. retailers are not bare, in spite of wholesale suspension of the manufacture of many important kinds of consumers' goods by the government officials who have been unable to achieve efficient production of needed war materials and at the same time insure the supply of essential items for consumers. Certain items such as refrigerators, washing machines, radio sets, silk and nylon hose, and watches are scarce, but can be obtained by consumers who have initiative and know where to look for things.

Gaps in supplies, however, are beginning to make their appearance. Canned corned beef from the Argentine which used to go begging at 17c is now difficult to find, at 35c for the same size can. Canned Chinook salmon once 40c a pound is now 88c and not generally available. Narrow elastic needed for replacement in Susie's bloomers and Tommy's self-help garments is practically non-existent.

Aside from grocery stores and butcher shops, there are on the whole surprisingly few empty spaces on the shelves and counters. There are changes in kinds of things featured—baby clothes and accessories in the five-and-ten-cent stores are taking a more prominent position, and space devoted to metal "junk jewelry" is being slowly contracted as current stocks become exhausted and necessary metals go into the making of weapons of war.

The average consumer, naturally, is not fully aware of what is happening and why. Sugar was rationed, as nearly everyone in time came to agree, to give Washington officials practice in organiza-

tion of rationing and to prevent the same "shortage of surplus" that happened for a time in 1941 to the gasoline supply of the Eastern States. After the crop of strawberries had proved pretty largely unmarketable because of too small allotments of sugar, the government found ways to ease up on its allowances. Soon the average housewife found that she not only was able to get more than she needed, but she was even expected to buy more than she needed at a given time, and store it up against future use, on government orders to "hoard," no less.

People are inclined to appreciate that there may be some reason for shortages of imported accessory items, like coffee, but having been brought up, particularly during the last ten years, to believe that one of the chief problems in this country was to get rid of enormous surpluses of foodstuffs, they are inclined to be skeptical of the need for or even the reality of the asserted shortages of important foods like meat. The memory of little pigs and valuable fruit crops destroyed in the name of the Triple A's "crop-control" program still lingers.

It is undoubtedly true that the food supplies in this country are far above what are required for our own needs. As a result of the failure of the Washington, D. C. planners to take into account the shortage of tin and the difficulty of maintaining a huge volume of shipments, stocks of evaporated milk intended for lend-lease shipment are piling up. Stocks of cheese are so large that many factories

(Continued on page 23)

Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf. **Technical and Editorial Assistants:** Grace Matthews, E. B. Albright.

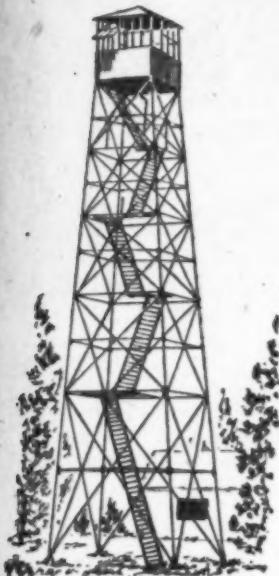
Symbols used to indicate sources of data and bases of ratings: **A**—recommended on basis of quality; **AA**—regarded as worthy of highest recommendation; **B**—intermediate with respect to quality; **C**—not recommended on basis of quality; **cr**—information from Consumers' Research's own tests or investigations; **1, 2, 3**—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; **a quality judgment is independent of price**; **41, 42**—year in which test was made or information obtained or organized by the staff of Consumers' Research.

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The Consumers' Observation Post

REDUCTION IN AUTOMOBILE INSURANCE constitutes one ray of sunshine in the gloomy automobile tire shortage and gas rationing picture. The National Bureau of Casualty and Surety Underwriters and the Mutual Casualty Insurance Rating Bureau have recommended reduction in rates for bodily-injury liability insurance applying to private passenger automobiles in New York, New Hampshire, Virginia, North Carolina, and Washington. The underwriters bureau announces that the same reductions will be made in twelve eastern states effective October 1, 1942, and the reductions will be made retroactive. No changes, however, have been made in the property-damage liability rates.

* * *

BUTTER can now be stocked whenever supplies are plentiful and prices low. It is hard to know these days whether storing an adequate supply of food for the family's needs is the action of a thrifty and wise consumer or that of a hoarder. Be that as it may, advice on storing butter comes from the California Agricultural Extension Service, for those who have a storage space. Butter for storing must be of the best quality, since off-flavors will become more pronounced during storage. A clean stone jar or wooden keg should be well scalded before the butter is put in. A keg should be soaked in a saturated salt solution for some time to kill any mold that it might contain. Prints of butter may then be packed closely into the container and covered with salt solution prepared by adding 2-1/2 pounds of salt to each gallon of water, the water having been previously boiled for 15 minutes and then cooled to a very low temperature. A porcelain plate should be inverted on top of the butter prints to keep them below the surface of the brine and then a clean, well-washed non-porous stone placed over the plate. The container should then be covered tightly and stored in the coolest place available. Butter pickled in this way may be stored for three or four months.

* * *

FINE LEATHER HANDBAGS are now considered luxuries in Canada, and a tax of 25% has been levied on all leather handbags made since June 1942. Canadian women are being advised to recondition their worn leather purses, and fore-sighted women in the United States will be wise to investigate bag repairing and renovating services that are available in their vicinity, against future needs.

* * *

PICKLES may not be plentiful for civilian consumers during the coming year, for the National Pickle Packers Association has pledged 30% of the salt pickle pack for government purchase during the coming year. Purchases are so large that the Chicago Quartermaster Depot has even appointed a special buyer to handle purchases of pickles for the Army.

* * *

CHEWING GUM is not a sure method of eliminating unpleasant breath, enabling a person to remain awake and alert while driving a car, an important means of increasing vitality or strength, nor is it an effective beauty treatment for keeping the facial muscles young through exercise, according to a stipulation entered into by Frank H. Fleer Corporation (Fleers Dubble Bubble Chewing Gum) with the Federal Trade Commission, in which it agrees to discontinue such claims. As a matter of fact, an editorial in one dental journal points out that gum chewing is a potential danger to health by weakening of one of the body's digestive fluids, and possibly increasing the tendency toward development of tooth decay.

NO MORE TWO-COLORED BROWN AND WHITE SHOES if they have leather soles. Manufacturers are even forbidden to make shoes which are sewn with a shade of brown thread different from the leather, according to a recent government order. The color must match, and the WPB will frown on the attempt to achieve a two-colored effect by using buckles or bows of a contrasting shade or even of clear plastic. At least that is the interpretation that the government's representative gave to the shoe trade last month. Fortunately, stocks this year are ample so that women won't actually come into contact with this regulation for at least a year. By that time somebody will undoubtedly have explained to the Gentlemen in D.C. empowered with authority to supervise the minute details of women's apparel that there are more effective ways of winning the war than issuing elaborate "directives" designed to police the colored bows and trimmings of women's footwear.

* * *

HOW TO WORRY SUCCESSFULLY ABOUT YOUR AUTOMOBILE, a timely and interesting booklet, is issued free of charge by the Studebaker Corp., South Bend, Indiana. The booklet lists 22 causes of low gasoline mileage that every car owner should worry about, in so far as they are applicable to him and his car. Information is also given on such important items as how to check gasoline mileage, how to make tires last longer, and how often to check tire inflation.

* * *

ANTIFREEZE in the form of Zerone, an alcohol type of solution manufactured by E. I. DuPont, has had a ceiling of \$1 per gallon set on its retail price. Anti-freeze solutions of all types will be hard to get this year, and the WPB has ordered manufacturers to reduce production of all the leading kinds to 50% of 1941's output. Consumers will need to avoid losses by waste and spillage if they are to be able to run their cars safely in this winter's coldest weather.

* * *

WHEN STEAK, LIVER, AND PORK CHOPS go on the ration list, the nutritionists whose responsibility it is to keep the Nation fit will be faced with the difficult problem of suggesting substitutes in the home menu to replace the iron in meat. A good ten-ounce steak contains an ample supply, but as a Baltimore hospital nutritionist notes, it takes a lot of milk, eggs, raisins, navy beans, whole-wheat bread, molasses, and leafy vegetables to supply enough iron when meat is cut down. Since a study made in 1939 indicated that at least 70% of adult women in this country have nutritional anemia, it looks as if the health experts would have their troubles. Also, the planners, who are above concerning themselves with matters that don't lend themselves to the statistical approach, are going to find there's more to the meat problem than merely dividing up a deficient supply, on a statistical average basis.

* * *

SIGNS OF THE TIMES. Sears-Roebuck in Birmingham advertised its Coldspot refrigerator but without the refrigerating unit. The slogan was "Ice It for the Duration and Electrify It After the War." The guarantee furnished promised that after the war an electric unit at a reasonable price which would fit the refrigerator would be supplied.

* * *

BARGAINS: A DuPont cellulose sponge still available on some dealers' shelves outwears rubber sponges, which are fast disappearing anyway. It is more satisfactory than the natural sponge and can be boiled to sterilize it. Size 6 sells for around 40 cents.

Pro-Tek, a hand cream for industrial workers, protects the skin against paint, grime, grease, printing ink, etc. It can also be used effectively by the busy housewife in painting and in doing grimy household cleaning, or for farm or auto repair work, and other dirty or greasy work. An eight-ounce can sells for 30 cents, at Walgreen's and other drugstores.

* * *

NO BARGAIN: Rainbow E-Z Stickon Ribbon, intended to be used for facing faded or dirty Venetian blind tapes, sells in rolls of four yards for 39 cents in many five-and-ten's. These E-Z Stickon tapes were pretty much of a dud. Not only did they fade badly in a very few hours of sunlight exposure, but they lost their rayon-like finish or sheen, and quickly acquired an unsatisfactory dull, cottony look. Worse still, perhaps, the "stickum" on the back of the tape deteriorated quickly and so greatly that no adhesive properties were left after a period of exposure to light and air.

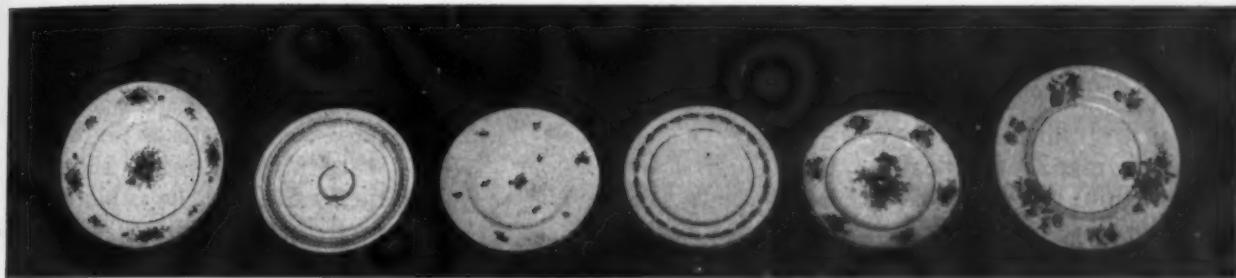


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Are Your Best Dishes China or Earthenware?



Made-in-America China

Left to Right: *Lenox* Rose—American Beleek China in the millionaire class. *Warwick*, Blue Laurel, pattern C-9433—94 pieces, around \$85. *Pickard*, Floral Chintz pattern—bread and butter plates like sample shown, priced at \$13.50 a dozen. *Franciscan China*, Arcadia Blue pattern, a newcomer—bread and butter plate shown, \$24 a dozen. *Syracuse*, Santa Rosa pattern—dinner service for 12 (94 pieces), priced at \$91.75; for 8 (53 pieces), \$46.65. *American Haviland*, Pasadena pattern—service for 8, priced around \$52.50.

NOT ALL DINNERWARE OR TABLEWARE IS CHINA, technically and correctly speaking. The housewife who refers to her best set of dishes as "china", may be surprised to learn that it is likely not china at all in the correct sense of the word. Practically speaking, there are two types of dinnerware, porcelain or china, and earthenware or whiteware. For the purpose of assessing duties on imported ware, U. S. Customs authorities use the classifications vitrified and non-vitrified.

Although the terms porcelain and china are sometimes used interchangeably, there are differences in their materials and manufacture. Porcelain is fired at a higher temperature, is harder, and its glaze is more resistant to scratching than china. True porcelain, except for vessels designed for laboratory use and porcelain used by the electrical industry as insulators, is not produced to any considerable extent in this coun-

try. The fine porcelain dinner sets and tableware were imported from Europe before the war, and since imports are now cut off, true porcelain-ware at present is chiefly of interest to experts and collectors.

China, on the other hand, which is a nearly or completely vitrified product, is manufactured by a number of firms in this country. It is considered by some experts to possess a number of qualities which make it superior to European porcelains and English bone china for dinnerware. It has a tougher body which enables it to withstand the rough treatment often received in dishwashing and resist shocks better. The glaze of American chinaware is harder than that of English bone china, and although it is not so hard as the glaze of European porcelains, it is highly resistant to scratching.

The basic and important difference between china and earthenware is that china is

translucent, and non-absorbent. When it is chipped it does not absorb water or food fats. China does not chip or crack easily. Earthenware on the other hand is opaque. More important than this, when the glaze is chipped off, the body of the ware may absorb dishwater, grease, or other liquids in varying degrees. China is not likely to develop the fine network of cracks in the glaze known as crazing, to which earthenware is susceptible. Professor Arthur S. Watts, of Ohio State University, an outstanding authority in the field of ceramics has, however, pointed out that the glaze of American earthenwares has been improved and hardened in recent years so that the tendency to craze in service has been greatly reduced.

There are several types and grades or qualities in earthenware. As a rule, a set of earthenware is less expensive than a set of china, although in English dinnerware where

you are paying for the prestige of a famous name, a set of Spode, Wedgwood, or Myott earthenware might sell for as much as a set of American-made true china.

So far as is known at the present time, the tendency of earthenware to absorb liquids when it is chipped is not necessarily a menace to health, if dishwashing is correctly done and dishes are then sterilized by rinsing in water at a high temperature in the way required by public authorities for restaurant crockery. An expert ceramist, however, will turn up his nose at the idea of eating or drinking from dinnerware which has been chipped and cracked. He will not go so far as to admit that if a person with a cold should drink coffee out of a chipped cup there is danger of transmitting the germs to someone else, even though the cup was carefully washed with soapsuds at the proper temperature (140° to 160°F) and rinsed in clean water at 170° to 190°F, but he will admit great distaste for the idea of drinking out of such a cup, even though it may appear to be clean. Furthermore it has been reported that many cities have ordinances forbidding the use of any cracked or chipped dishes in public places; this would indicate a recognition of the serious disadvantages of earthenware dishes from the standpoint of public sanitation.

True china does not absorb food or liquids, as you may test for yourself. Take an old piece of china and an old piece of earthenware both of which have been chipped or broken and put a drop of red ink on the chipped spot of each. Let it dry. Then try

to wash it off. You will find it impossible to wash off the ink from the earthenware piece, for it will have been absorbed into the body of the material, below the chipped



"Rose of Lamberton" made by Scamell—the bread and butter plate shown is priced at \$1.10.

or broken surface. The absorption of fine earthenware is reported by Professor Watts as 10% to 15% whereas American household china absorbs less than 0.1%.

Semi-vitreous china is an American term for earthenware when its clay body is fired to a hard state but remains porous. In England it is customary to refer to this type of ware as "fine earthenware." It is opaque or nearly so, and, according to Professor Watts, absorbs 4% to 10% of water in an absorption test.

A study made by the Federal Bureau of Standards indicates that the glaze on American china is softer than that of high-grade European porcelain, but in the toughness of body and resistance to shock, the American ware compares favorably with the highly vitrified European porcelain. English bone china, however, is more fragile than the American product, and its soft glaze renders it more susceptible to

attack by the action of soda when it is washed in hot water with certain common cleaning compounds, and too, it is subject to wearing and abrading in daily use.

Women in the past have been foreign-label-conscious when it came to buying dinnerware. Experts on chinaware have estimated that formerly 51% of the table china used in this country was imported, but now only about 21% is brought in.

This is an excellent time for women to become familiar with American-made china. Not only will they find it very interesting to get acquainted with the different patterns and makes of true china, but they will give a stimulus to American industry which may help to make an important contribution to the war effort. A recent issue of an English chemical journal lamented the fact that in England before the war, the consumption of laboratory porcelain was too small to make an industry self-supporting if it manufactured that class of goods alone. The result was that Great Britain had depended largely on Berlin-made porcelain, and when the war broke out, the country was not ready to meet increased demands for this vitally necessary class of laboratory apparatus.

The British journal pointed out that in conjunction with the manufacture of domestic porcelains, laboratory ware could be made, if turned out simultaneously with domestic ware, at prices that would not be prohibitively expensive. Thus the impetus due to increased interest on the part of American consumers in American-made china might well have an important by-product in higher

quality and lower prices of domestic-made laboratory porcelain.

Because of the greater care which must be taken in firing china, and the high percentage of rejections of defective pieces, the price will be higher than for earthenware. All things considered, however, greater service will likely be rendered by true china.

In making a selection of a pattern remember that underglaze decoration which is put on before the glaze is applied and fired is more durable than overglaze which is put on after a piece is glazed and fired. The overglaze decoration is often brighter and more attractive but has the serious disadvantage of poor durability, for it scratches easily and may be worn off in spots by abrasives and the wearing action to which the surface of dinnerware is exposed. On the other hand, Professor Watts points out that if the decorations are properly adapted to the glaze over which they are applied, they will sink into the ware and are scarcely more exposed than the surrounding glazed surfaces. The ware using overglaze lends itself more readily to a variety of color and pattern, and consequently is more popular than the better-wearing underglazed ware.

Some of the makes of high grade American china are:

American Haviland, Theodore Haviland & Co., 26 W. 23, N.Y.C., and Merchandise Mart, Chicago, made by Shenango Pottery Co., New Castle, Pa.

Franciscan China, Gladding, McBean & Co., San Francisco.

Lamberton China, made by Scamell China Co., Trenton, N. J., for Fisher Bruce & Co., 219-221 Market, Philadelphia.

Pickard China, Pickard Inc., Antioch, Ill.

Syracuse China, Onondaga Pottery Co., Syracuse, N. Y.

Warwick China, Warwick China Co., Wheeling, W. Va.

Except for Lenox china (made in Trenton, N.J.) which is in a class by itself and somewhat beyond the purse of the average family, there is not a great deal of difference between the various brands of American-made china with respect to composition and wearing quality. The attractiveness and good taste of the decorations are a matter largely of personal opinion (except as has been noted with respect to underglaze and overglaze), and hence on that score one's own preferences are the most satisfactory guide.

The prices of the different sets will vary with the costliness and elaborateness of the decorations and the careful control of manufacture and rigidity of inspection given the final product to eliminate pieces that are warped or show other defects. True china is necessarily more expensive than earthenware because of the higher degrees of skill and care required in handling it and the greater amount of spoilage and hence of rejections caused by the higher firing temperatures. The most careful grading separates dinnerware as follows: selects, first grade, second grade, third grade, and culls or lumpware. A less discriminating classification is: R. K. (run of kiln), second grade, and culls or lump.

Don't be afraid to use good china for every day; it should stand the wear and tear quite successfully. There are, however, a few simple rules to be observed:

Don't expose dinnerware to sudden changes of temperature from cold china closet to hot oven, or from refrigerator shelf to scalding water.

Do not slide one plate across another; and avoid allowing silver-plated blades of knives or metal such as aluminum to rub across dinnerware.

Do not allow coffee to stand in cups when they are removed from the table; rinse them out promptly.

In washing dishes, use soft water if possible—a good water softener in hard water sections—and a mild soap such as one of the following: *Sweetheart Flakes*, *Chipso*, *Concentrated Super Suds*, *Fels-Naptha Chips*, *Octagon Granulated*, *Oxydol*, *Rinso*, *Silver Dust*, *Super Suds*, *20 Mule Team Borax* Chips, *Montgomery Ward's White Chips*, or *White King*. For earthenware dishes warm rather than hot water is best, to prevent crazing and cracking. (In restaurants, of course, only very hot water is safe, from the standpoint of sanitation, no matter what kind of ware is used.)

One of the best water softening methods is made by dissolving about 1 teaspoonful of tetrasodium pyrophosphate (tspp.) to 1 gallon of water. The amount needed will depend somewhat upon the hardness of the water, and may be decreased below the quantity suggested to reduce expense, or increased to improve cleaning action, as experience with one's own conditions may indicate. Avoid using more than the minimum amount required to soften the water since an excess may be injurious to some dinnerware. Finally, always rinse dishes thoroughly after washing, and drain off the rinse water.

Ways to Obtain Additional Heat this Winter

IF YOU ARE one of those who are not in a position to convert your present heating plant from oil to coal-burning, you are, no doubt, one of the consumers who are worried about the rationing of fuel and what it will do to your comfort and costs for the winter's heating. You also would, no doubt, like to know what can be done to supplement the heat that can be obtained from the oil which will be allowed.

There are many who have purchased small electric radiant heaters, or the type of heater by which an electric or gas heater is combined with a steam radiator as a means of obtaining additional heat, but few perhaps appreciate fully that any method of heating in which the heat is originally furnished by means of electricity is much too expensive. By way of illustration, with an electric heater the cost of heating a given room would be roughly 15 times as much as if the same room were heated by the ordinary house heating system using a coal-furnace or oil-burner.

The reduced quantity of fuel oil the consumer will be able to purchase will often make it important or necessary to find supplementary sources of heat. If this will be required over any considerable period, it is necessary to consider means of providing sources of auxiliary heat that have lower operating costs than any electrically operated unit. Such means may be a stove or fireplace or the addition of an auxiliary to the existing steam or hot-water system in the form of a small coal-burning heater of the sort that is commonly used for heating the domestic hot-water supply. The possibility of providing additional heat by this method is particularly interesting, where

the regular heating plant can almost carry the load, but not quite.

Fireplaces

If your house already has one or more existing fireplaces, using

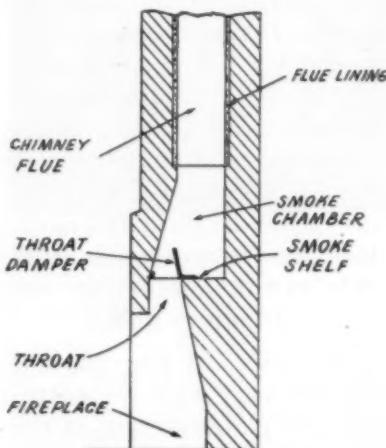


Fig. 1—Sectional View of a Fireplace.

them as efficiently as possible would probably be the simplest means of obtaining additional heat. Those who do not have fireplaces and wish to install them should proceed with care and give some advance study to the problem, particularly if the erection of a new chimney is involved.

Much, of course, will depend upon the design of the house. If the chimney for the heating plant is suitably located and has an extra or unused flue in it, the fireplace may be connected to the spare flue. The design of the fireplace itself is of great importance, for, unless of the correct design and shape, the smoke instead of going up the chimney will come into the room, or will do so whenever draft or weather conditions are unfavorable, and the fireplace will always be unsatisfactory. The most important requirement of a fireplace

is that its opening shall not be too high, for the higher the opening the greater the chance of smoking. Its height should be about 2/3 to 3/4 of the width. Thirty to 36 inches high is ample for fireplaces up to 48 inches wide. Its depth should never be less than one-half its height. For a low or medium chimney the area of the *throat* should be equal to the flue area, with throat length equal to the width of the fireplace opening. The flue area should be 1/10 or more the area of the fireplace opening. A good *throat damper* to regulate the draft and a *smoke shelf* to prevent down drafts are essential.

Should you be unable to secure the services of a competent heating contractor who by his answers to your questions shows clearly that he understands correct fireplace construction and will guarantee the finished job not to smoke, it would be desirable to obtain the following pamphlets:

Construction of Chimneys and Fireplaces—Farmers' Bul. 1649, by the Bureau of Agricultural Engineering, 18 p., illus. November 1930 (slightly revised April, 1933). 5c from Supt. of Docs., Washington, D. C.

A Standard Ordinance for Chimney Construction (including chimney construction for fireplaces). Third Edition, Revised 1927. 26 p., illus. The National Board of Fire Underwriters, 85 John, New York City.

A reliable mason should then be secured to work according to the instructions and advice that they contain. He should *follow* their advice, not introduce modifications or ideas of his own—which may or may not have stood the test of time and experience.

Use of a metal fireplace form of the correct size, around which the masonry is laid without spe-





cial planning or calculating, helps to assure the homeowner's getting a fireplace that will work properly. A correctly designed form provides two advantages: (1) assuring the correct proportions for the fireplace and its openings, and (2) providing at least some (though not great) increase of efficiency over the ordinary fireplace through cold-air intakes and warm-air outlets which these provide. Among the manufacturers of such air-circulating fireplace units are:

Heatilator Inc., Syracuse, N.Y.
Bennett Fireplace Co., Nor-

wich, N.Y.

Superior Fireplace Co., 1046 S. Olive, Los Angeles, Calif.

Some of these firms may now be unable to supply their fireplace units. (The Majestic Co. of Huntington, Md., advises that it cannot now deliver fireplace units or basket grates.)

In some of the older houses, fireplaces have been boarded up, unused, for years. No one should proceed to open up such a fireplace without first making or having made by a competent person, a careful inspection of the chimney at all points, but especially where it passes through ceilings and floors, and roof timbering. Sometimes such chimneys were boarded up to avoid risk of setting the house on fire, because of some danger long since forgotten (for example, wooden beams projecting into the chimney wall). Even small cracks in a chimney can be dangerous, because they may permit passage of sparks, under certain conditions of fire, weather, and wind. A method that has been much used to test an old chimney is to cover the top with a wet sack or a board and light a smudge fire of straw or tar paper in the fireplace. The escaping smoke will reveal any cracks that may be present.

Blazing logs in an open fireplace have their time-honored place in creating a cheerful and picturesque atmosphere, and they help greatly to provide a natural and desirable type of ventilation, with removal of excess dust, moisture, and odor. But as a means of supplying heat for the family's comfort, they are ex-

heating, one should learn how to manage it to best advantage.

The heating value of different species of wood varies, but in general a cord of dry wood such as hickory, oak, beech, sweet birch, hard maple, rock elm, locust, or long-leaf pine will weigh about two tons and have about as much heating value as a ton

of anthracite coal (if burned in an equally efficient heating unit). One and one-half cords of short-leaf pine, Douglas-fir, sycamore, soft maple, black cherry, or two cords of cedar, redwood, poplar, cypress, basswood, spruce, or white pine would be required to produce the same amount of heat.

In burning wood on andirons, the ashes should be kept to the level of the bars on which the logs rest in order to form a bed of glowing charcoal which will not only radiate and reflect heat into the room, but plays a useful part in drying out and igniting the fresh fuel when it is added. To check or slow down a wood fire, cover the burning logs lightly with ashes. Remember that easily flammable objects must never be placed "within sight" of a wood-burning fireplace, because such objects can be set on fire by radiant heat alone. Thus paper, magazines, rugs, clothing, and similar items

should be kept well away from the fireplace opening, and in any event, well off to the side so that they don't "look into" the fire. Many homes have been set on fire by a flying spark from a bit of splitting or exploding wood, hence a good fine-mesh fireplace screen should always be used in front of a fireplace that is in use. The screen has an especially important place in a home where there are children, keeping them away from the danger of falling into the flames or getting their clothing ignited.

When a steady heat for a con-

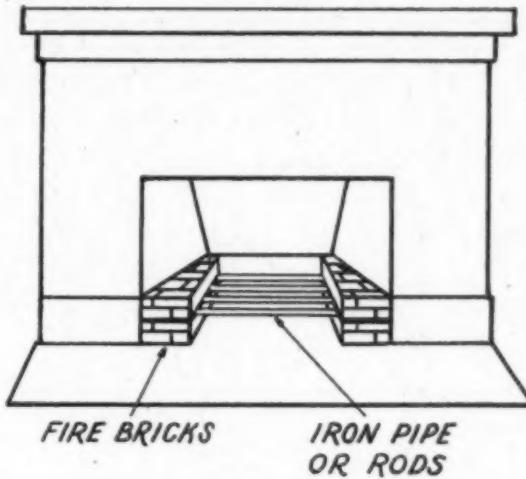


Fig. 2—Homemade Basket Grate.

The fire brick should be built to a height of 6 inches from the floor. A layer of furnace cement is then troweled on the top and the bars or pipes embedded in it leaving a space of 1 inch between the bars. The fire brick should then be built up for another 6 inches. At the very front of the grate, three or four bars (not shown in illustration) lying in a vertical plane should be embedded in the brickwork to form a low front for the grate which will hold the coals in place.

tremely wasteful as compared with any other type of heating system. About 90 percent of the available heat goes up the chimney when a fireplace is used, and several times as much wood will be required to heat a room by means of an ordinary fireplace as would be required if a stove of reasonably good design were used (nearly 10 times as much according to Robert T. Hall and M. B. Dickerman of the U.S. Department of Agriculture). Nevertheless, since the fireplace has its important place for mild weather and emergency

siderable period is wanted, coal is a much better fuel than wood, for it requires much less attention, and fluctuates less in its output of useful heat.

Basket Grates

To burn coal, a grate is required. This can either be a basket grate or a homemade grate of iron pipe or rods and fire brick. With the growing scarcity of metals, basket grates are becoming difficult to find, and to make matters worse the War Production Board has forbidden their manufacture (a measure designed to force conversion of the main house heating plant to coal in every case). This seems to be a most illogical step considering the small amount of low grade metal they require and the fact that their use would be a means of saving considerable quantities of fuel oil (more critical than cast-iron), particularly in fall and spring. Some basket grates may be available secondhand. Those who cannot secure one can readily improvise something that will serve the purpose very well as shown and described in Figure 2 (page 9).

If hard coal is used, stove or chestnut is probably the best size to burn in an open fireplace. Cannel coal, which has about the same Btu value as anthracite, is also satisfactory in parts of the country near the sources of supply, where its price is low. However, many users have failed to burn coal effectively because of their not realizing that special arrangement must be made that the air from the floor into the fireplace must all pass up through the bed of coal, and not around the sides of the basket. The basket grate should be centered in the fireplace and space around the ends, and at the back (if the fireplace grate is not clear against the rear wall of the fireplace) be built up with fire bricks as in

Figure 3, so that all of the cold air goes up to and into the grate, and must pass through it on its way to the chimney. To start a new fire in the fire basket, burn wood or charcoal over the entire grate area and do not add the coal until the wood or charcoal is well ignited and in a glowing condition.

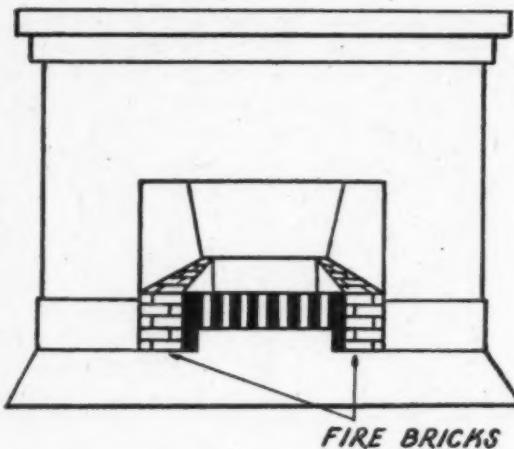


Fig. 3—In using a foundry-made basket grate, the spaces between the ends of the basket and the side walls of the fireplace should be filled up with fire brick.

The correct location of the thermostat is an important element in any heating system, and when a fireplace is used, it is especially important that the thermostat should be well away from the fireplace, and so located that it never receives heat radiated from it. Get into the habit of turning the thermostat several degrees lower when the fireplace is in operation. In this way, considerable fuel can be saved, because when heating of the room and its occupants is by radiation, as it is largely when a fireplace is used, the air temperature does not need to be nearly so high for equal comfort as when the other more customary methods of heating are employed.

Stoves

For those who wish heat provided in the most efficient and inexpensive manner, there is no

doubt that the best solution to the problem of providing temporary additional heat is a stove burning wood, coal, or coke. Usually a flue will be available, or can be constructed cheaply, but in all cases where this is done, care must be taken that the arrangement is safe against fire.

Under the worst conditions, it may be necessary to remove a pane of glass from a window and replace this with a piece of sheet metal cut for the flue pipe to pass through. *This should never be done unless the pane of glass removed is large enough to permit the installation of a double-walled metal ventilated thimble (according to National Fire Protection Association requirements) at least 12 inches larger in diameter than the stove pipe (or 8 inches larger if the annular space of the double-walled thimble is filled with mineral-wool or rock-wool).* The installation of such a thimble is necessary to avoid the risk of igniting by radiant heat the near-by woodwork of the window or its frame, if the smoke pipe becomes overheated, as may often occur, when no one is around to guard against it.

Types of chimney where the stove-pipe is set on a bracket built out from a wall are always regarded as unsafe, and most insurance companies will insist that any chimney connected to a stove be carried all the way to the ground, so that it rests, as it were, on its own feet.

Stoves, fortunately, can still be bought, but it is understood that in purchasing a coal-burning stove, one is required to sign a statement that the stove is necessary for use in the purchaser's residence in which there is no equipment of the same type, and that no other equipment is available which can be used in its place. For some reason connected with the peculiar and cir-

cious methods of thinking in the OPA or WPB, a corresponding statement is not required for the purchase of a wood-burning stove. Sears-Roebuck and Montgomery Ward list a fairly large variety of heating stoves in their latest catalogs, and the Franklin-type stove (a sort of stove-fireplace combination made of cast-iron) is (or was) manufactured by the Portland Stove Foundry Company, Portland, Maine. Many of these Franklin stoves which were relatively very efficient heating devices, can still be bought at moderate prices as antiques. For those who can obtain sawdust for fuel, the *Conifer Sawdust Burner* made by the Western Foundry, Portland, Oregon, is recommended.

The prospective purchaser of a stove should not overlook the secondhand market, where there are often large stocks of small household heating appliances, and where the consumer who knows stoves and their habits from experience in the country or in camp, can often find real bargains.

Auxiliary Heat from a Coal-Burning Water Heater

If your heating system as a whole cannot be readily converted to burn coal, the consumption of fuel oil can be considerably reduced by adding a coal-burning unit as an auxiliary or booster heater, connected to your present house-heating system. One valuable aid to economical operation that is afforded by such a unit is that in the mild weather of fall and spring, the auxiliary coal-burning unit can furnish all the heat needed, alone.

The auxiliary unit should consist of a water-heating appliance such as is commonly used for heating the domestic water supply with coal (small sizes are often called jack-stoves). The grate area should correspond to a grate diameter not less than 12 inches. Such a coal-fired water heater sells for about \$25

up. (The larger the size chosen, the more of the heating load it will carry, and the less frequent attention for adding coal and removing ashes it will require.)

The auxiliary unit should be connected to the existing boiler or furnace as shown in Figure 4, using supply and return pipes for the outgoing and returning water of large diameter, and as directly connected as practicable. (The regular boiler should be well insulated to avoid wasteful heat loss, especially at times of mild weather when the auxiliary heater is expected to carry the heating load alone.) Care must be taken to insure that the supply line from the heater to the boiler is connected to the latter below the water line. The installation of course should be made by a competent heating contractor. Be sure that there is a proper temperature-and-pressure relief valve on the hot water boiler or main as a safeguard against explosion.

CR strongly advises owners of oil-burning systems which cannot be converted to coal to confer with their rationing boards

before adding an auxiliary coal-burning unit as described above or even a pipeless hot-air furnace. There is a strong possibility that the rationing boards, guided more by the finespun legalism which pervades the OPA's administration rather than good common sense, may be ordered to regard the auxiliary coal-burning unit as the main heating unit. Thus, instead of granting the basic ration of oil for the oil burner, the rationing boards if required to give excessive weight to legalistic or ambiguous regulations, may issue only a supplementary or abnormally limited supply of oil in cases where the house is or may be heated partly by coal. The consumer who has such a board or regulations to deal with may be better off without the auxiliary coal-burning equipment. Considering the possibility of new, conflicting or rescinding regulations being issued at any time, the subject should in any event be explored fairly closely with local, state or regional rationing authorities in case of any doubt or conflict of opinion

(Concluded on page 24)

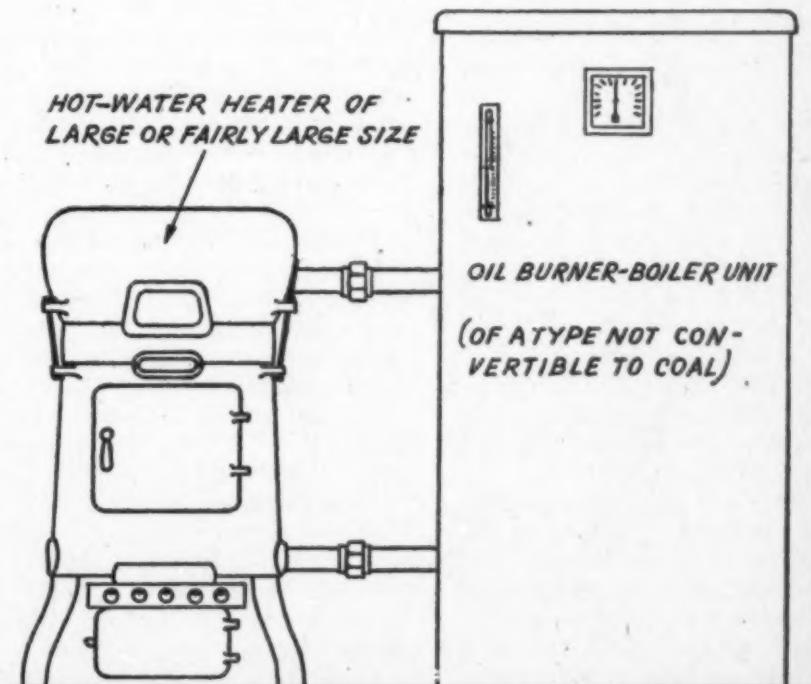


Fig. 4—Method of connecting a coal-burning water heater to an oil-fired boiler-burner unit to provide an auxiliary heat supply under emergency conditions.

This Year's Toys— Next Year's Will Not Be So Good

UNFORTUNATELY FOR THE TOY TRADE, about 70% of its sales are concentrated in the brief period of about six weeks just preceding Christmas, and the really heavy selling period is limited to the short space of two weeks before Christmas. This is unfortunate, too, for the boy and girl consumers, for the sudden and concentrated riches of an avalanche of toys on Christmas morning can bring a sense of surfeit and bewilderment.

This year's toy sales will be the largest ever, though the *variety* offered to parental surveyors of the Christmas market will be considerably reduced, and toward the end of the Christmas season is likely to be seriously restricted.

Effects of Restrictions and Shortages

This year, toy manufacturers are under a heavy handicap as to materials and, of course, as to available skilled workmen. They are prohibited from using rubber at all in making their product, and they cannot employ more than 7% of metal or plastics. Even scrap or waste metal cannot be used beyond the 7% limit. Even if plastics were more freely available, there would still be a difficult problem, for making the molds used in forming the plastics involves elements of highly-skilled scarce labor and scarce materials. Lately, limits have even been put upon the use of wood.

Even now toy stocks are small and limited in the best toy shops. Ordinarily, shipments of toys from manufacturers continue up to about a week before Christmas, but as early as the end of August this year, such shipments from manufacturers in the metal toy field had mostly ceased. Last year the parent interested in tools

and mechanical toys could fairly revel in the luxuries and variety the catalogs and store counters offered. This year the consumer buying toys will need to exercise more care and foresight than normally.

The manufacturers of the larger and more complex toys, particularly mechanical toys, are now all or nearly all producing important war materials or components. The smaller manufacturers of the poorer or cheaper toys often used a type of machinery or materials which has made their plants poorly adapted for conversion. The availability of many of the most important types of toys in this year's stocks is solely due to the foresight of some large retailers who bought large stocks 'way back in 1941 for 1942's Christmas trade.

The mechanical and "transportation" toys of the better qualities are going to be very scarce, and probably the market will be completely cleared of them two weeks or more before Christmas. Among such relatively scarce toys are airplanes made with balsa wood, miniature gasoline engines, toy sewing machines, stoves, and vacuum cleaners, printing and mimeographing outfits, mechanical trains, locomotives, stationary steam engines, and a wide variety of the types of miniature digging, transporting, and shop tools which delight the heart of the mechanically-minded boy. Gone, too, or on the way out, are toys using copper wire or electric heating units, such as telegraph and telephone sets, casting outfits, and probably by next year almost every sort of advanced mechanical, optical, or electrical type of play item.

Carpenters' and other toy tools are scarce or missing, but there are still stocks, though small, of mechanical, chemical, and micro-

scope outfits, mineralogy sets, and the like. Anyone planning to purchase one of these should look into the problem just as soon as stores put their stocks on display.

Tricycles and bicycles will be scarce or unobtainable; marble games and doll carriages will be difficult to get when the present supply is gone.

This Year's Toys

This year, articles of wood and cardboard are going to be seen increasingly on toy counters. Many popular sorts of toys in which metal was an essential element have had to be redesigned so as to work with wood parts. In some cases, the results have been highly satisfactory; in others, not too good. Colored cardboard, put together by notching, is now being used in toys hitherto cheaply made of metal, or common plastics. Of this type of toy there has been a very rapid development, and a wide variety are being shown this year. It is to be hoped that as the manufacturers acquire experience, they may learn to make more durable types of cardboard toys.

There are all sorts of military and related toys this year, and there can be no doubt at all of the extreme popularity of this type of toy (which was a poor seller until a few months ago, even after the shock of the attack at Pearl Harbor). There are, of course, the usual pistols, machine guns, toy cannon, and anti-aircraft guns, but there are also jeeps, tanks, submarines, ambulances, and always the airplanes. Airplanes occupy by far the leading place in the field, as the airplane-building hobby today easily takes first rank among young constructors. There are also toy outfits for nurses and

doctors, and blackout kits, and air-raid wardens' kits. There is, as well, a wide selection of games based on war themes.

Games and puzzles are in great demand now, and of most kinds there will probably be an ample supply. In recent months their sales have increased enormously, probably because they afford an effective and inexpensive means of diverting the minds of children, and often of adults too, from the severe strains of the conflicting, harassing and contradictory news and warnings of the press and radio.

One type of toy that will be as easily available as usual is what the trade calls "stuffed toys." These include dolls and other toys specially suited to the youngest children. Even in these, however, some substitutions of materials have had to be made, even rayon fabrics being unavailable except for low-grade rayon reclaimed from mill wastes. For the kapok floss formerly much used for filling of stuffed toys, substitute materials have also had to be found.

Importance of Toys

It is unfortunate that government administrators have decided to restrict so severely the materials going into toy construction. Most people will easily see that cutting down of toy production and types is poorly adapted to the problem of improving or maintaining morale.

An especially important point regarding toys in wartime is their great value in providing a degree of compensation for the hardships and handicaps of the war period. Toys can perform a tremendous service in the home, in helping to compensate the child for deficiencies in food, heat supply, and restriction of opportunities for recreation and play that are bound to follow the heightening and spreading disruption produced by the war effort.

Certain important aspects of toys which have been too little

considered by parents were emphasized, in a conversation with the writer of this article, by M. r. J. M. Cloud of Playthings, the national magazine of the toy trade. Mr. Cloud's information and suggestions in connection with this report have been most helpful and much appreciated. Toys have an important corrective value for bringing about desirable changes in attitudes or tendencies in

a child. The child who tends to be over-solitary in his or her play can often be led to exhibit more gregarious tendencies by providing toys and games that call for the participation of others. On the other hand, a child that seems to lack resources for self-entertainment, and is overanxious to seek the companionship of other children, may have any excessive tendency in this direction corrected by choosing from among the types of toys that require personal and individual thought and attention and help to stimulate the creative, inventive or constructional mood. The child who is casual or uninterested as to the cost or value of things can be taught arithmetic and the care of money by the toy grocery store. The mechanical, chemical, constructor and handicraft kits, and some other experimenter and mechanical toys have of course their obvious part to play in encouraging the constructional or



Drawn for Office of War Information

spatial sense in children who seem to call for encouragement or development along that line.

Toys to Suit the Age

Parents should not give too many toys, and above all, they should not give things that are too complex for the age and temperament of the child. When there are too many toys, the child often dashes from one to another without ever finding time or interest to focus upon one or to learn its lessons. If the toy is too complex or too advanced for the child's age or temperament, the effect is also bad because children are easily discouraged or put at a disadvantage by things that are beyond their mastering—for example, screws, bolts, fittings, or gadgets that are too small to be manipulated by young and inexpert fingers, or devices that are too intricate or involve too many relationships or motions for the child to

understand. It is best to wait until the youngster is of an age when he can use and appreciate such things. If a complex toy shows signs of being beyond the child's present interest or ability, take it away for a time, and let it reappear when he has acquired a little more age and maturity.

In general, the simplest mechanical toys, including constructional blocks (and there are a large and interesting variety of such blocks available nowadays), are suitable for children of about the age of five. The simple erector and mechanical sets begin to be of interest and value at about seven.

Weaving outfits will be suitable and interesting for girls of eight to ten years, who would also find interest in a toy sewing machine (so far as these are still available). Chemistry and other experimenter sets are suitable perhaps at age ten, which is about the end of the ready-made toy period for most children, except for chemistry, electroplating, electric-eye, microscope kits, construction hobbies, and similar handicraft or semi-technical toys.

For the older children, the experimenter toys and the construction (*Meccano*, *Erector*) type of toy are particularly interesting and such toys are more important now by far than in normal times, as millions have come to appreciate the vital need for early acquisition of some mechanical and constructional sense as a foundation upon which to build a knowledge of the essential sciences and mechanic arts that are sure to play an increasing and central part in future American educational programs. The principal American manufacturers in this field are A. C. Gilbert and the Porter Chemical Co., but the Gilbert company's toys now selling are stock manufactured some months ago, for that company, which did about 80% of the business in its field, is now

given over entirely to manufacture of military matériel.

We should perhaps add a word of caution with regard to electrical and chemical toys. Any electrical device involves a certain degree of hazard, even to adults, and those which tap the 110-volt power circuits may often involve special risks for children unless they are mature enough to comprehend and follow a warning as to the points where hazards exist. Especially it must be explained to children that they must not interfere with current-carrying wires or poke them with fingers or with a bit of wire, a screwdriver, or other tool. Low-voltage devices such as those run from dry batteries should be quite safe, as also the types of toy trains and similar devices which operate from a step-down transformer and speed-control that lowers the voltage to a value that could do very little harm even to very young fingers. However, the transformer itself is an appliance that should not be treated carelessly or ignorantly, and the child should be cautioned not ever to attempt to take it apart or try to make repairs of any sort on it. Storage batteries of any type are not safe for children's use. There are hazards, too, with some chemical toys, for some of these may permit dangerous or poisonous combinations of substances to be made.

These cautions, however, should not be regarded as advice against the child's learning to use chemical and electrical toys, for in these times when all must take risks and face danger, it is probably a bad thing for anyone to attempt to provide complete security or safety even for children. The point is, rather, that the parent should accept full responsibility for seeing that play with potentially hazardous toys is not attempted at too early an age, that playing with them, especially at first, is closely supervised, and that full and careful instructions are given, not once

but several times, for their use and the way in which they are to be handled and cared for, so that foolish, needless, or avoidable risks will not be incurred.

An important aspect of the toy problem, clearly reflected in the stocks of toys in the shops, is the element of vogue or fad. Children, particularly boys, seem to know just what they want in the way of playthings at any particular epoch. Little can be done to divert or alter a boy's interest in model airplanes, or handicraft or Boy Scout kits, or an electric train at the time when the particular sort of toy is the "going" article among his young friends.

Toy Stores

The fond father who is traveling on war work and who fancies searching for something unusual or extra fine for his youngster, will wish to have at least a look at the nationally famous toy store of *F. A. O. Schwarz*, Fifth Avenue and 58th St., New York, whose stock is without parallel in this country—something indeed for any toy fancier to marvel at. Another well-known toy store that should be mentioned for the benefit of those who may be near Cincinnati is *Arnold's Fairyland*.

For any parent or young person specially interested in the hobby toy field, the making and assembling of toy boats, trains, airplanes, etc., *Polk's Hobby Shop*, 429 Seventh Avenue near 33rd, New York City, will be worth a visit.

* * *

In connection with the foregoing article, CR wishes to acknowledge the assistance of Mr. A. L. Kirkham, President of F. A. O. Schwarz Co., who contributed from his wide knowledge of the toy market in general, and this year's market in particular, and furnished valuable and interesting background information.

Reducing Hazards of Electric Appliances

THREE IS HARDLY A HOUSEHOLD that will not now or within a year or two be using an electrical appliance, such as a toaster, a washing machine, a flatiron, that in normal and happier times would be in line for extensive repairs, or in many cases to be junked and replaced. There are extra dangers in old and well-worn appliances, which should not be underestimated. Special precautions should be taken by periodic inspection and testing to insure that no appliance has deteriorated to such an extent that its use involves risk of electric shock.

Hundreds of lives now needlessly lost would be saved each year if everybody would make it a practice never to touch an electric appliance of any sort with wet hands or while touching at the same time another electrical fixture or fitting or a "grounded" metal object such as a plumbing fixture or a radiator, or while standing on a damp floor. An electric appliance in good condition should not be dangerous at any time, but all too often there is some defect, such as poor or deteriorated insulation or a tiny stray strand of wire, which makes the metal parts of the appliance alive with electricity, and then under the conditions mentioned an electric shock may be received. A good many such accidents result in death.

The 120-volt electric light current is safe only when the wiring has been correctly designed and installed in a workmanlike manner, and when all appliances and connecting cords are in good condition. It is a wise precaution in every household, especially one where there are children, to test the metal frame of the vacuum cleaner, toaster, washing machine, lamp stands, etc., to determine whether they become alive with electricity when the appliance is connected to the electrical

Electric appliances are often defective. A common result of defects is that the appliances may cause an electric shock. Even a slight shock may cause a serious accident, and in a good many cases, accidents with all sorts of familiar electric appliances have proved fatal. Not only are heating, cooking, and motor-equipped appliances often "shock-hazardous," but house wiring too is often at fault, either due to careless installation or to subsequent deterioration.

In this article, the consumer will learn how he can protect himself from some of the principal dangers of electric shock from defects in electric appliances or house wiring. Directions are included for testing an appliance for shock hazard in a very simple way; a simple instrument is shown that can be put together at trifling cost for quickly and easily testing the safety against shock hazard of any common electric appliance or fitting.

The discussion explains the circumstances under which special hazards exist in the use of appliances (for example, in damp basements), and indicates how some defective detail in the wiring system of the home may contribute to the possibility of serious injury.

circuit and the switch turned on.

How to Test an Appliance

If testing meters are not at hand, it is possible to detect a dangerous condition of an appliance with an ordinary trouble lamp. This is an ordinary tungsten lamp bulb screwed into a socket to which are connected two stiff, well-insulated wires about 9 to 12 inches long, having a quarter inch or so of their tip ends scraped free of insulation. The lamp should not be too large—a $7\frac{1}{2}$ - or 10-watt bulb is a good size, though a 25-watt lamp will serve. To test the appliance, plug it into the circuit and let it operate in the usual manner. Then, being careful to hold the wires of the trouble lamp only by the insulated portions, touch the bare end of one wire to the metal frame of the appliance, and the bare end of the other one to a bare (or unpainted) spot on a radiator or water pipe. A definitely dangerous condition is shown by even a faint spark at the end of the wire when contact is made to the radiator or water pipe. Any

lighting up of the lamp indicates an extremely dangerous electrical leakage. In making the test in this way, don't rest the appliance itself on the radiator, or bring it into contact with the radiator or any other grounded article such as an electric stove or refrigerator, or a metal sink.

Where a more reliable indication of the safety of an appliance is desired, the neon glow lamp, combined with a resistor of about 120,000 ohms (the value depends to some degree upon the individual lamp or how recently it was manufactured), connected in parallel with it can be substituted for the ordinary trouble lamp described. When the appliance is tested, a dangerous condition is indicated by any light visible from the neon lamp, for the lamp will light only when the current leaking through the insulation of the appliance exceeds $\frac{1}{2}$ milliampere (approximately). If a resistance of about 280,000 instead of 120,000 ohms is used in parallel with the neon lamp, any lighting up of the lamp indicates that the current leaking through the insulation of the appliance

is equal to or exceeds 1/5 milliampere. The brighter the lamp glows, the greater is the leakage of current. The leakage-current through the insulation of a new appliance should not exceed 1/5 milliampere.

A new 2-watt neon lamp suitable for this test costs about 50c at radio and electrical supply houses, and the resistor costs about 10c. A convenient porcelain electric socket for the lamp costs 10c. Thus for an outlay of about 75c one can build a reliable outfit for testing quickly and easily and upon a moment's notice, the safety of the insulation of an electric appliance. The operation of the tester depends upon the fact that the voltage at which the neon lamp will just light is rather critical for any individual lamp, being between 50 and 60 volts on alternating current for the 1-, 2-, and 3-watt sizes. The lamp is very sensitive and gives a faint light with a current through it of only a few millionths of an ampere, or 1/30 as much, approximately, as would cause a barely perceptible tingle or incipient shock.

When making any test for the safety of an electric appliance, it should be made with the switch of the appliance turned to each one of its possible positions. If the appliance has a thermostatic control or other regulator (as on an electric table stove, fan, or iron) the tests should be repeated with the different positions of the regulator. Finally all tests should be made again with the plug of the appliance reversed so that the prong which was at the top before now enters the bottom opening or slot of the socket. The reason for this is that sometimes an appliance may be electrically safe with one position of its switch or regulator and not safe when this position is changed, or safe with one position of the socket-plug and not with the other.

Sometimes the insulating material in an appliance such as an electric stove is of a type that

permits appreciable quantities of electricity to leak across it continually. (Asbestos, especially if somewhat damp, is such an insulating material.) In that event the appliance cannot be made entirely free from leakage current, but it can be made safe by installing a well-constructed ground connection. This is done by connecting the frame of the appliance to a water pipe by means of an insulated wire of suitable size, fastened to the pipe by a substantial ground clamp properly plated to provide rust-resistance. (Such ground clamps are regularly sold by electric appliance stores and mail-order houses.) For a washing machine the wire should be at least as large as No. 10; for an electric stove, at least as large as No. 8.

The ground connection allows the electricity to escape from the frame of the appliance to the water pipe where it will do no harm. If the ground connection is defective, or is broken anywhere between the appliance and the main ground clamp (usually found secured to a main water pipe in the basement), the insurance against danger provided by the fuses at the "entrance box" to the house circuits is lost, and the appliance may, without giving the slightest warning of danger, acquire a sufficient voltage to kill. If the insulation of the appliance protected with a ground connection should become defective suddenly, a fuse would be blown and the appliance thus automatically disconnected from the power supply without building up a voltage that could harm a person.

Dampness Makes for Greater Hazard

It is always more hazardous to use electricity in damp locations. If the appliance *must* be used in a damp basement or room with a concrete or damp wood floor, special protective measures should be taken. First of all a washing machine or an ironer must be well grounded. The

equipment should also be so located in the room that it *cannot be touched at the same time as a plumbing pipe or fixture*. A dry, raised, wooden platform to stand on, so constructed that no nails or screws extend through it anywhere to make contact with the floor, is a very desirable safety feature. It should be large enough to accommodate both the appliance and the operator. Wearing rubbers that don't leak, while using the washing machine, is also an effective safety precaution well worth taking.

Importance of Keeping Equipment in Repair

Electric equipment should always be kept in good repair. When connecting cords are worn so that the insulation is impaired, they should be replaced. Any place where a cord has been kinked sharply should be regarded with suspicion as a potential point of failure of insulation, and such a cord should be replaced if there is any doubt of its safety. Cords used in damp locations should be of the heavy-duty, rubber-covered type.

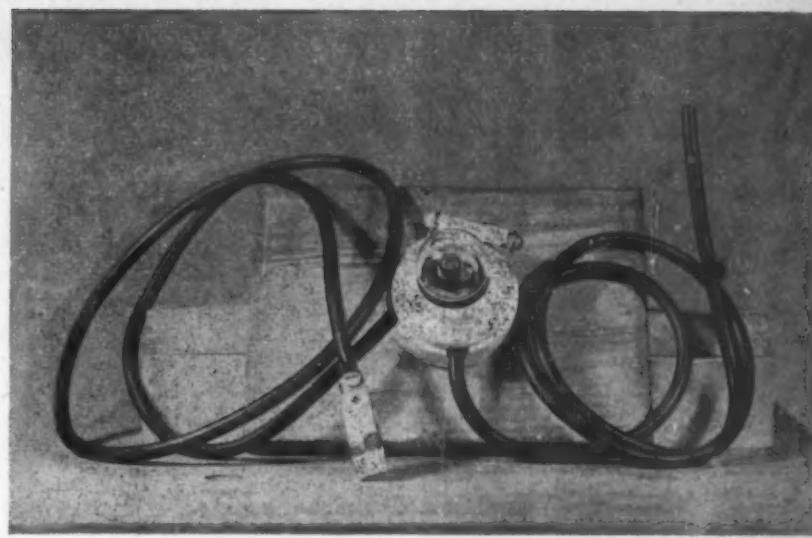
Be sure that proper fuses are used; the branch lighting-circuits generally require fuses of 15 ampere size. If the wiring is No. 12, as is often installed in modern homes, instead of the usual No. 14, 20-ampere fuses are suitable. See that the fuses are labeled to show approval by the Underwriters' Laboratories. Pull-chains on electric sockets should contain an insulating link as a protection against accidental shock due to a defect that may often develop in the socket.

House Wiring Systems Offer Hazards

There are many ways in which the wiring system of the house may become unsafe. The insulation, for example, may become worn through, or the ground connection may become disconnected or may deteriorate in some manner (for example, by corrosion in a damp cellar). When

this happens, dangerous electric shocks can even be received from the plumbing or heating systems. It is a wise precaution to have the wiring system of the house checked against defective insulation. One way to do this, if the wiring is of the metallic-sheathed type having wires protected with rigid (conduit) or flexible (BX) metallic tubing, is to test the tubing with a trouble lamp connected between the tubing and a water pipe in the same manner as already described for testing the metal frames of electric appliances.

Not long ago a small boy in a house close to Consumers' Research undertook to wash his hands. After drawing a bowl full of water and soaping his hands, he touched the faucet with one hand, the other hand being dipped in the water. He immediately received a painful shock. Being a typical small boy and not too eager to wash his hands anyway, he fortunately did not persist in his effort, but he did report his experience to his mother. Investigation showed that the wiring was defective, in several ways, and, as often happens in house wiring systems, there was a combination of two abnormalities, either of which alone could have done no particular harm. First, there was a short circuit between one of the lead wires and the grounded box and spiral-wound BX sheathing in the metal box supporting the porch light; second, the grounding of the system by means of a pipe was found to be inadequate, because the earth at the point where the ground pipe was driven was rather dry, and hence afforded a poor path for electric currents to the earth. Thus the electric charge that was imparted by the short circuit to the metallic sheathing of the wiring system could not escape readily to the ground. Instead it leaked to the sewer pipe and charged all the drain pipes in the house with electricity. The boy with one



A Simple and Inexpensive Apparatus for Testing Electrical Insulation

It consists of a small 1-watt neon lamp, connected in parallel with a resistor of 280,000 ohms, and mounted in a porcelain socket with insulated connecting wires having one short bared tip for making contact with the appliance to be tested, and a spring clamp or its equivalent to connect onto a grounded pipe. Any faint glow in the lamp indicates a current of at least 0.2 milliamperes flowing through the circuit. This value is a reasonable upper limit for leakage through electrical insulation that is to be considered safe. By changing the value of the shunt resistor, the lamp can be made to detect other values of current. The device thus provides a sensitive, simple, and rugged microammeter or milliammeter for determining whether a small current is above or below any desired limit.

hand in the basin of water and the other on the faucet was, therefore, near to receiving a serious shock.

In another house near-by, under circumstances similar to those reported, a voltage of 10 volts was measured between the water piping and sewage piping—almost sufficient to cause death under the conditions of deep immersion of the body in the water of a bathtub. In the same house, the door handle of a new electric refrigerator was found to be charged to 110 volts when the attachment plug was inserted in one of the two possible ways in the receptacle near-by. Yes, there are many homes with serious latent electrical hazards, some perhaps existing from the day the house was originally wired; the unexpected deaths occur when two unusual things happen or go wrong at the same time.

A plumber doing repair work

Consumers' Research Bulletin

or making extensions of piping often removes or alters ground connections. If he should do this, there is great danger that a condition may exist in the wiring that could cause a fatal shock in case of an appliance or wiring defect developing subsequently. Therefore a careful checkup of ground connections is in order, especially right after the plumber or heating plant installer or repairman has done work in the basement of a house.

To prevent accidents with electricity, remember first to keep all appliances and wiring in good condition; then, as an additional safeguard, just in case something has gone wrong, avoid touching the metal parts of any appliance when touching plumbing or other metal objects or when standing on a damp floor, particularly a dirt floor or one of brick, tile, or concrete resting directly on the ground.

"Tire-Saving" Preparations

TO DAY, TO MANY AUTOMOBILE OWNERS, automobile tires seem almost worth their weight in gold. Everyone recognizes the need to make every effort to lengthen the useful life of all tires, to make them run 25,000 miles or more, if possible, whereas many might otherwise be good only for 14,000 to 18,000. But consumers will not save their tires by any shortcut methods, or by purchasing glowingly-advertised preparations of unknown composition with which tires are to be painted or "treated." There are several chemical products already being offered to save tires or extend their life, and as more and more tires get near the wearing-out point, scores if not hundreds of such products will appear on the market. Among a number already being advertised and sold are: *Rubber-Life* (Overman & Co.), *Rub-R-Lyfe*, *Tire Shield*, *Horn Rubber-Aid*, *Protecto*, *Firestone Extra Mileage Tire Preservative*. One manufacturer is marketing a product called *Tire Life*, for bicycle tires.

Of these, *Rubber-Life* has probably received the widest publicity and salesmanship. This is advertised as a new, different, remarkable modern invention, an amazing new product with claims such as these: It "is not a superficial coating," "It penetrates the tiny pores of rubber, and forms a new solid mass of the millions of rubber particles on the surface of the used tire, thus hardening the rubber, and making the tire far more resistant to wear and tear, without affecting the natural qualities of the rubber." [Italics ours—CR.]

When these claims are examined by a careful or experienced reader of advertising, they seem far from convincing. First, the observant man will know that a normal tire tread does not contain pores; *Rubber-Life* or any other preparation can hardly

penetrate or seal pores which do not exist.

The claim that *Rubber-Life* does not affect the natural properties of the tires is probably true—too true, indeed, for the validity of the advertiser's other claims—for it goes directly against the statement that the rubber is hardened by the treatment. (Rest assured that rubber will *not* be hardened by any treatment that does not affect the natural properties or qualities of the material.)

Tests of *Rubber-Life* by the United States Testing Company, Inc., for the manufacturer appeared to show that there was a small increase in hardness but one so small as to be (if a real change did occur) within the limits of experimental error.

The laboratory's findings that the surface of samples treated with *Rubber-Life* were 21.45% more resistant to abrasive action than the untreated samples might seem to be important to anyone who had not stopped to realize how simply a valid and convincing road test could have been carried out for testing the effects of wear on separate parts or zones of the same tire, treated and untreated with the product. (A few thousand miles of driving would have told the story in a conclusive way.)

When painted on a tire, *Rubber-Life* forms a hard, glasslike surface, which naturally resists the peculiar type of abrasion without rolling or flexing that is applied in the conventional laboratory wear tests. The manufacturer, indeed, concedes that under road conditions "the hard and shiny surface formed by the application of *Rubber-Life* flakes off within a few minutes of driving." Thus, it is obvious that the figure of 21.45% increased resistance to abrasion has no significance in that it is not applicable to tires in actual use on

the road under normal driving conditions. *Rubber-Life* is sold at \$6.95 per gallon. Water glass, or silicate of soda solution, which an expert analytical chemist reports to be essentially the same thing as *Rubber-Life*, can be purchased at retail for \$1 per gallon, but CR does not recommend its being applied to tires, no matter at what price it is offered. Water glass is a syrupy liquid familiar to farm people, as an egg preservative. It is also in wide use in industry for gluing or pasting in manufacture of cardboard boxes and shipping cases.

The Federal Trade Commission has issued a complaint against the Rub-R-Lyfe Company (not to be confused with *Rubber-Life* sold by Overman & Co.) charging false, misleading, and deceptive statements regarding its product. The maker, as usual, claimed just about everything, including preservation and renovating of the rubber against atmospheric conditions, stoppage of checking, cracking, oxidation and frictional heat, and restoring of resiliency and elasticity. Also among the maker's claims, was a statement that the preparations had been tested and approved by leading chemists. This, too, according to the Federal Trade Commission's charge, was not true.

From a consumer's standpoint, it is always wise to assume that such a claim is not true, when the "leading chemists" do not have their names and laboratory or consulting connections clearly and responsibly set forth in the advertising or sales literature, and when copies of their reports in full are not made freely available to any and all who inquire about the product and who may ask to see and study such reports before buying the product.

Other products mentioned by CR earlier in this article are mostly paints and, beyond their

Modified Automobile Engines To Save Gas

A Brief Note on the "Half-Engined" Car

(Continued from page 18)

possible value in protecting the rubber to some extent from deterioration due to the action of light, could have little value. Protection against light is, however, more a factor today than formerly, for when tires are consumed, as they tend to be nowadays, at a very slow rate, in the hands of the more careful and considerate drivers, the deteriorating effects of exposure to light and air tend to become significant.

If you are going to put a paint on your tires to protect them against the effects of sunlight, be sure to use something that is guaranteed on the evidence of a competent consulting chemist qualified in rubber technology and testing, not to cause deterioration of tire rubber. Not every manufacturer who decides to go into the business of selling a high-priced chemical specialty, knows what is good for rubber, and judging by previous experience and the cases of *Rubber-Life* and *Rub-R-Lyfe*, the promoters in this new type of business are very likely not to trouble their heads about the question before proceeding to market their preparations.

The moral of this story is: Don't paint or treat your tires with any product of unknown composition, particularly one claiming to reduce wear and increase tire mileage. Don't believe the advertising claims unless they are fully supported by *trustworthy, substantial proof in the form of detailed reports by qualified scientists or technologists, in written form*. Be sure the laboratory report, if one is offered, *applies directly to the claims of performance or saving or extra life made in the advertising. Disregard claims not so supported*.

WITH MOTORISTS obliged to squeeze every mile possible from the gasoline allotted, the news that an ingenious plan had been evolved by one of the big oil refiners which would really increase gasoline mileage of cars by a substantial percentage was a real harbinger of hope to motorists. The American public has long been subjected to a barrage of advertising of worthless gas saving gadgets which has falsely claimed large increases in miles per gallon of gasoline.

Standard American cars are notoriously overpowered, a fact we often emphasized as a reason for much waste of gasoline and oil, and any method which would reduce the power and increase the gasoline mileage would be most welcome. However, reducing the power of an engine already built and equipped with delicately adjusted accessories is a vastly different problem from building an engine of lower power or fewer cylinders in the first place.

There is no doubt that the proposed method of modifying engines outlined by the Sun Oil Company does save gasoline. The power or output of the engine, however, is reduced by more than the half that would be expected, because of the drag caused by the dead pistons and other factors. This, and the generally slow or lousy response of the modified engine, which makes it act more like the engine of a truck than of a modern car, should not be objectionable to many drivers who are not adverse to shifting gears more often than formerly if they can go more miles on an A or B rationing card than would otherwise be possible.

From studies made to date by CR, it is evident that the plan

proposed by Sun Oil Co. has merit, particularly for certain makes of cars, in spite of some possible disadvantages. It seems likely now that the deficiencies may be corrected or become of distinctly secondary nature compared to the importance of saving gasoline and extending car-life. Careful studies of the question are now being made, and CR hopes to be able to issue definite advice on this subject in its next BULLETIN. Subscribers are strongly advised to wait for this article before having the engine of their car modified at any considerable cost of time or trouble, by reducing the number of working cylinders.

Meanwhile, if steps have not already been taken to obtain the highest practicable economy in gasoline consumption, the consumers who own cars using more than normal amounts of gasoline should take their cars to service stations equipped with dynamometer and exhaust-gas analyzer, and have the ignition and carburetor systems properly adjusted for the best economy in operation. This in many cases will require the installation of smaller size carburetor jets. With the 35-mile speed limit now in effect, new and more economical carburetor adjustments are possible and improved gasoline mileage should be obtained from all cars. Reducing the engine idling speed if it is excessive for the prevailing temperature or time of year, starting gradually, coming to a stop very slowly so as to make the least possible use of the brake, and use of low and second gear as little as possible, are other most important measures for getting the highest possible gasoline mileage.

Sewing Machines, New or Old, Need Adjustment for Good and Efficient Sewing

THE average consumer will assume that a new sewing machine just received from the manufacturer or dealer will be in perfect adjustment. Actually, even brand-new machines are rarely in the best possible adjustment, and many are pretty bad in that respect. Yet in the average family, a sewing machine may be used for years without the user's being aware of the imperfections in the seams which the machine produces (when thread tensions, for example, are incorrectly set). Even if the machine was correctly adjusted when received, the adjustment would not be permanent, for use will alter it, and besides certain changes are required when extra heavy materials are sewed, or unusually coarse or fine threads used.

The most important factor in producing good, uniform sewing with a machine is the *correct adjustment of thread tensions* for the materials being used. These tensions are nothing more than brakes which control the drag or pull on the thread as it is fed into the machine from the spool of thread above, and from the bobbin in the shuttle. One of these tensions acts on the thread after it leaves the spool and before it feeds downward to the eye of the needle; the other or lower tension is a part of the shuttle or bobbin case, and determines the drag on the under thread as it feeds from the bobbin. If the braking action on the spool- or needle-thread is greater than that on the under thread, the stitching produced will be unbalanced; if either or both are much too tight, puckering of the cloth, or breaking of the thread will result; if both are too loose, the thread will come off faster from the spool and bobbin than it is required, and the stitching produced will be loose, or maybe even loops will be formed.

The following method for adjusting these tensions is recommended:

1. Wind the bobbin with the size and type of thread to be used for actual sewing; then thread the machine with the same size

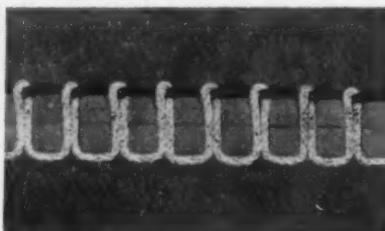


Fig. 1—Photograph of model illustrating effect of upper tension being too tight. The upper thread lies on the surface of the cloth.

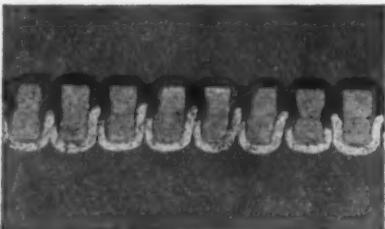


Fig. 2—An enlarged view of stitching when tensions are ideally adjusted so that top and bottom threads interlock halfway between the opposite surfaces of the fabrics.

of thread. Use of different colors for the upper and lower threads is helpful, as it will facilitate judgment of the finished stitch during the process of trial and adjustment.

2. Obtain a piece of unbleached muslin about 6 inches wide and 8 inches long. Fold it the long way, and stitch diagonally across the double thickness at an angle of about 45°.

3. Inspect the stitching. If it is similar to Fig. 1, with the upper thread lying on top of the cloth and the bottom thread locked over it, the *upper tension is tighter than the lower one*. If it is the reverse of Fig. 1, with

the bottom thread lying along the fabric and the upper thread locked over it, the *lower tension is tighter than the upper one*. If either of the above conditions exists, the upper tension should be adjusted first (tightened or loosened; the upper tension is usually the only one which needs to be altered) until stitching as shown in Fig. 2 is obtained. Next take the ends of the stitching between the thumb and first finger of each hand and pull until one or both threads break. (See Fig. 3.)

If by this method the thread does not break, *both tensions are too loose*.

If the upper thread breaks, the *upper tension is tighter than the lower*, and should be loosened.

If the lower thread alone breaks, the *lower tension is tighter than the upper one*, and the upper tension should be tightened. If the stitch is either too loose or too tight as a whole, both upper and lower tensions must be tightened or loosened, and the test repeated.

The tensions are correctly adjusted if, upon being pulled in this way, (1) both threads break, (2) the cloth does not pucker, and, on the other hand, (3) the stitches are not too loose. If the cloth pockers, the stitching is too tight, and one or both tensions should be relaxed somewhat, according to the considerations already discussed. If loops are formed, one of the tensions is too loose. If one of the tensions is too loose, the part of the thread which appears on the outside of the garment may wear away with use or wearing of the garment, and the seam come apart.

4. If the material to be sewed is of a greatly different character from the piece used in carrying out the adjustment, the actual material to be sewed should be

tried in the machine to determine whether the tension adjustments as finally made are suited to it. If not, adjust the tensions by the procedure that has been described.

Needle Size

The needle must be of the correct length, and of the exact type required by the particular machine. The correct *size* or *number* of needle must be chosen for the fabric and thread being used. Nearly all instruction books furnished with sewing machines give a table showing the size of needle and size of cotton, silk, or linen thread to be used in sewing various specified fabrics. Be sure to consult and follow the proper table for your machine. Also be sure that the needle is fully and correctly inserted and never attempt to use a needle which is bent, blunted, or rusty.

Presser-Foot Adjustment

One of the most frequent complaints of owners of sewing machines is that their machines will sew satisfactorily on light or medium weight goods, but not on heavy goods, or vice versa. This trouble can be traced to the misadjustment of the presser-bar spring, which controls the amount of pressure on the presser foot. The usual trouble when goods do not feed through is too much pressure on the presser foot. To remedy, loosen the thumbscrew (turn to left) at top of presser-bar. If there is too little pressure, the goods will not be held firmly, but will tend to slip sideways. The pressure of the foot should be only heavy enough to enable the feed dog to move the work along evenly and to hold the material down so that it is not lifted with the needle.

Use of heavy material in a machine adjusted for light or medium weight material will result in too great a pressure on the material, due to the increased thickness of the material, and hence when heavy material is to be sewed, the presser foot should

usually be loosened by the adjustment provided for the purpose. Do not pull on the material; let the machine feed itself.

Repair Parts and Supplies

The following are a few firms that supply replacement parts for practically all makes and models of machines. The first two firms listed supply motors and controllers that are suitable for converting treadle-operated sewing machines into electric-motor-driven sewing machines. Montgomery Ward and Sears-Roebuck also carry a few replacement parts.

Best Built Sewing Machine Supply Co., 132 W. 25, N. Y. C. (Motors available on high priority only.)
Torrington Co., 200 Fifth Ave., New York City.

A. G. Brewer Sewing Machine & Supply Co., 337 W. Madison, Chicago, Ill.

C. M. Bryson Co., Cleveland, Ohio.

If you need a new part and do not have a catalog or instruction book illustrating the various parts, it is advisable to send the old part (carefully packed) to one of the above companies for duplication. State the make, type, and serial number of the machine for which the part is required.

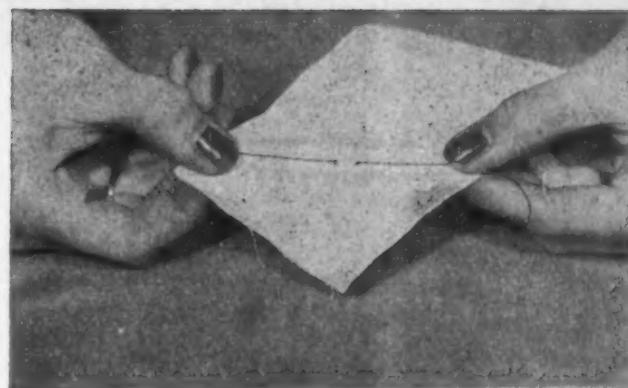


Fig. 3—The operator is testing the correctness of the tensions by pulling at opposite points of the bias-stitched fabric. The upper or black thread has broken, indicating that the upper tension is tighter than the lower.

References

"Cleaning the Sewing Machine," CONSUMERS' RESEARCH BULLETIN, April 1940 (reprint 5c, from Consumers' Research).

Care and Adjustment of the Sewing Machine—Mimeo Bul. 222. N. Y. State Coll. of Agric., Ithaca, N. Y.

Your Sewing Machine—Bul. 140. 20 p. 1936. Free, from Agric. Ext. Service, Ohio State Univ., Columbus, Ohio.

Reconditioning the Sewing Machine for Efficient Service. 8 p. 1936. Iowa State Coll. Ext. Service, Ames, Iowa.

Care of the Sewing Machine—Ext. Bul. No. 143. 8 p. 1935. Mich. State Coll., East Lansing, Mich. Single copy free; in lots of more than one, 3c each.

Clothing Construction—Ext. Circ. 281, 282, 284, 285. Free, from State Coll. of Washington, Pullman, Wash. Useful points on sewing and use of the machine.



Buy U. S. War Bonds and Stamps

Phonograph Records

By

WALTER F. GRUENINGER

TO GET THE CHRISTMAS GIFT RECORD SETS you want in this period of restricted output it seems wise to order early. Here is a group of recent sets which are highly recommended as gifts:

Orchestra—Beethoven's *Symphony No. 5*, Columbia Set 498, \$4.73, and his *Symphony No. 8*, Victor Set 908, \$3.68. Franck's *Symphony in D Minor*, Victor Set 840, \$5.78, which is closely akin to D'Indy's *Symphony on a French Mountain Air* on Victor Set 913, \$3.68. Mozart's *Symphony No. 38*, Columbia Set 509, \$3.68. Tschaikowsky's *Symphony No. 4*, Columbia Set 468, \$5.78, and his *Symphony No. 5*, Victor Set 828, \$5.78.

Concertos—Two melodious works off the beaten track are Chausson's *Concerto for Violin, Piano and String Quartet*, Victor Set 877, \$4.73, and Mozart's *Concerto No. 3* for French horn on Victor Set 829, \$2.63. In addition, Grieg's *Concerto for piano*, Victor Set 900, \$3.68.

Chamber and Instrumental Music—Beethoven's *Kreutzer Sonata*, Columbia Set 496, \$4.73, and his *Quartet No. 9*, Columbia Set 510, \$4.73. Mozart's *Quartet No. 15*, Columbia Set 462, \$3.67. Schubert's *C Major Quintet*, Columbia Set 497, \$6.83.

Recommendations of vocal and light music will be made next month.

* * *

Decca Records has notified the trade, according to *Variety*, that its new manufacturing formula guarantees a longer wearing disc. Some dealers claim 45 playings has been the maximum obtainable while the American make of records that is regarded longest wearing is considered at this time to be good for about 80 playings.

Ratings of Phonograph Records

Prices include Excise Tax

Key: AA—highly recommended; A—recommended; B—intermediate; C—not recommended.

Quality of pre-
Music tation Recording

ORCHESTRA

Brahms: *Variations on a Theme by Haydn*. Minneapolis Symph. Orch. under Mitropoulos. 4 sides, Columbia Set X225. \$2.63. Most critics regard this as a Brahms' masterpiece. The performance does not measure up to Toscanini and the Phil.-Symph. on Victor Set 355 though it is consistently good.

Quality of pre-
Music tation Recording

Dvorak: *Symphony No. 5 (New World)*. AA A AA Rochester Phil. Orch. under Iturbi. 10 sides, Victor Set 899, \$5.77. A popular, melodious symphony employing negro spiritual themes is given a straight performance which lacks the feeling of the Czech Phil. performance on Victor Set 469.

Mozart: *Symphony No. 38 (Prague)*. AA AA A London Phil. Orch. under Beecham. 6 sides, Columbia Set 509. \$3.68. A major Mozart symphony performed under the baton of a conductor distinguished for his Mozart. Tops all other recordings of the *Prague Symphony*.

Williams: *London Symphony* (9 sides) A AA AA

& Bizet: *L'Arlesienne Suite No. 2—Farandole* only (1 side). Cincinnati Symph. Orch. under Goossens. Victor Set 916. \$5.77. The symphony was composed just before the first world war and revised twice thereafter. In this final version it is an impressive product of 20th century English orchestral composition. The performance is sympathetic, the recording first rate.

CHAMBER & INSTRUMENTAL

Beethoven: *Quartet No. 9 (Op. 59, No. 3)* (7 sides) & *Minuet from Quartet No. 5* (1 side). Budapest String Quartet. Columbia Set 510. \$4.73. A quartet masterpiece played to perfection by the foremost string quartet of our day.

Ernst: *Hungarian Airs*. Renardy (violin). 2 sides, Victor 11-8113. \$1.05. Show-off piece.

Ravel: *Bolero*. Fingerle & Schutt (piano duo). 2 sides, Decca 29121. \$1.05. If you like this number, one of the orchestral recordings will prove much more exciting.

VOCAL

Gretchaninov: *Cradle Song & Mouse-songs*. B B A Robeson (baritone). 2 sides, Columbia 71367. \$1.05. To me Robeson has never sounded as thrilling on records as in person. These songs, which you can do without, display a resonant voice that lacks lustre.

Massenet: *Le Cid—Pleures, Mes Yeux & Herodiade*—*Il Est Doux, Il Est Bon*. Sten (mezzo-soprano). 2 sides, Columbia 71368. \$1.05. Two pleasant, popular arias sung beautifully in a richly sensuous mezzo-soprano.

Moussorgsky: *Song of the Flea & Child's Evening Prayer*. Eddy (baritone). 2 sides, Columbia 17312. 79c. The famous comic *Song of the Flea* falls short of Chaliapin's on Victor 14901. Eddy's performance of both sides, however, is more sensitive than usual.

Mozart: *Arias*. Pons (soprano). 6 A B AA sides, Columbia Set 518. \$2.89. Lily Pons sings *Voi Che Sapete, Queen of the Night's Aria, Ach, Ich Liebe, Blondine's Aria, Alleluia*, most of which overtax her vocal resources.

Verdi: *Otello—Monologue & Death of Otello*. Melchior (tenor). 2 sides, Columbia 71389. \$1.05. An outstanding disc of dramatic singing.

Wieniawski: *Kujawiak & Rossini: La Dansa*. Kiepura (tenor). 2 sides, Columbia 17332. 79c. The bloom of the Kiepura voice has gone, if judged by this performance, though the vulgarity remains.

LIGHT, FOLK & MISCELLANEOUS

Cohan: *Songs*. Bauman (baritone). A B AA 8 sides, Columbia Set C89. \$2.63. A group of tunes from the motion picture *Yankee Doodle Dandy* and two from Little Nelly Kelly sung with gusto but with little else.

Cohan: "Yankee Doodle Dandy". Soloists. 6 sides, Victor Set P125. \$2.10. Hits from the Cohan film—*Over There, Grand Old Flag, Give My Regards to Broad-*

	Quality of <i>Inter- Fidelity of <i>Music</i> <i>of Recording</i></i>				Quality of <i>Inter- Fidelity of <i>Music</i> <i>of Recording</i></i>		
way, etc. At times strained for effect but nevertheless more Cohan era flavor is retained here than in competing sets.							
Cohan: "Yankee Doodle Dandy". Waring and His Pennsylvanians (orchestra, glee club). 6 sides, Decca Set 330. \$2.10. More of the same done in the over-arranged style of 1942. Least desirable of the three sets.	A	B	B	Flamenco Songs and Dances, Vol. 2.	B	B	AA
Fomeen: <i>Songs of Inspiration</i> . Kuznetzoff (bass). 8 sides, Decca Set 303. \$2.63. Eight new songs in Russian and English, like cafe gypsy music though not particularly distinctive.	B	AA	AA	Carmen Amaya. 6 sides, Decca Set 288. \$2.88. Carmen Amaya who does most of the work here has made a reputation as a dancer, not as a singer.			
Danny Kaye (comedian). 8 sides, Columbia Set C91. \$2.63. "You'll laugh and you'll sing along" states the blurb. Rather, you are likely to tire of this quickly. Once was plenty for me.	C	B	AA	Carlos Gardel (baritone). 8 sides, Decca Set 333. \$2.63. "The greatest interpreter of the Argentine Tango" who was killed in an airplane accident seven years ago sings eight tangos in his uncommonly dramatic style. On the best disc, Decca 21280, appears <i>Caminito</i> and <i>Lo Han Visto Con Otra</i> .	B	AA	B
Strauss: <i>The Gypsy Baron—Treasure Waltz</i> . Pittsburgh Symph. Orch. under Reiner. 2 sides, Columbia 11800. \$1.05. A lilting waltz played with charm.	AA	AA	AA	Russian Folk Songs. Kipnis (bass). 10 sides, Victor Set 917. \$4.46. One of the supreme vocal artists of our time, accompanied by a balalaika orchestra, turns to lively and sombre folk songs of his country, few of which have been recorded before, to produce an album it is a genuine pleasure to hear frequently. Sung in Russian.	AA	AA	AA
Strauss: <i>Three Delightful Waltzes</i> . Vienna Phil. Orch. under Krauss & Kleiber. 6 sides, Victor Set 907. \$3.68. <i>Du und Du</i> , <i>Liebeslieder</i> , and <i>Morgenblatter</i> waltzes. Sweeping melodies played in true Viennese style, recorded about 10 years ago.	AA	AA	B	Stars and Stripes Forever. Waring & His Pennsylvanians (orchestra, glee club). 8 sides, Decca Album 345. \$2.63. <i>Stars and Stripes Forever</i> , <i>America Calling</i> , <i>Anchors Aweigh</i> , <i>Song for the Unsung</i> , <i>Roll Tanks Roll</i> , <i>Look Out Below</i> , etc. . . . thrilling patriotic and service songs presented with appropriate flair. For drama, <i>Look Out Below</i> (<i>Geronimo</i>) on Decca 18487 tops them all.	AA	AA	AA

Off the Editor's Chest

(Continued from page 2)

in certain parts of the country have had to close down for lack of a market, and we are now urged to reverse the government's request of a year ago to conserve cheese for the needs of Great Britain, and set ourselves to eating up the huge surplus stocks.

Nearly everyone has known of a family in which the man made a good salary on which his family should have been able to have a comfortable living, but his wife was a bad manager who could run through any amount of money he could earn by hard work and overtime, without anything to show for it. The little girl might come to school with a beautiful and foolishly expensive new bonnet, but with no rubbers, or shoes that were so worn that she got her feet wet. The little boy might have a new football that was the envy of all his classmates, but would shiver his way to school in nippy fall weather in last summer's thin cotton clothes, and both would likely be undernourished for lack of wise planning of meals and of adequate attention to the most ordinary rules of good nutrition. Present methods and orders for handling supplies of consumers goods which have emanated from Washington in a steady stream of arbitrary, unintelligent, and legalistic "directives" and edicts will remind all thoughtful people of the housewife who had no ability

or sense of balance in managing her outlays.

To such criticisms, the cry is sometimes raised that we are in a war, and everything, even the right to criticize wanton waste and mismanagement, must be sacrificed for its successful prosecution. As the recent Gallup poll indicated, the majority of people in this country are willing to make any sacrifice for the success of the war effort—but not for the mistakes of the amateur and bungling planners whose aim and goal at times seem to be to vie with each other in gloomy pronouncements of coming scarcities of everything—for everyone but the Army and the endlessly growing army of officials that clutter every Washington, D. C. office and apartment. The time has passed, however, when loyalty to our country and the intense desire to achieve a complete and speedy victory can be successfully cited as valid reasons for tolerating an evidently endless series of mistakes in judgment, ill-conceived, bungled and contradictory plans, lack of foresight, and just sheer ignorance of the practical needs of a population eager to win the war at whatever cost is necessary.

Take the case of meat alone. Statistics are quoted to show that the average consumption of meat in this country is $2\frac{1}{2}$ pounds per person per week. For the

purposes of a Ph.D. thesis, this figure may have some meaning, but in actual practice, to impose a Procrustean equality of consumption arbitrarily in this country will work grave injustices that may seriously affect, even endanger, successful prosecution of the war effort on the home front.

Consider the family of two adults and two children, ages eight months and three years respectively. The ration for this family reckoned on the basis of the national average would be ten pounds a week, largely consumed by the two adults. On the other hand, take a couple whose children are grown and living away from home, where both of the parents are engaged in war work. Their ration will total five pounds a week. Yet the ration for members of the armed forces is nearly a pound a day per man, and certainly there are many workers in war plants who need at least as much if they are to turn out the needed weapons of war. Furthermore, it was pointed out in a study made by Messrs. Harris, Bunker, and Mosher at the Massachusetts Institute of Technology several years ago that nearly 70 percent of the women in this country have anemia, due to deficiencies in the diet. It is pretty generally agreed that meat, such as pork,

(Concluded on page 24)

liver, and red meats, is most important among food items to be incorporated and increased in the diet of persons suffering from this shockingly prevalent type of ill health and deficient vitality. If this figure of 70 percent prevailed when the statistical average of $2\frac{1}{2}$ pounds of meat consumption per person was compiled, it would appear that the average was too low for adequate health in many millions of cases, and that the first task for the government to turn its hand to would not be how to divide up a too-small meat supply, but how to increase meat production, and how to encourage greater rather than decreased use of meat by the millions now eating far too little. (Much will be said about the possibility of complete and satisfactory substitutes for meat, and the nutritional experts are already beginning to develop propaganda along this line. There are no effective substitutes in fact for meat which, as anthropologists know, is the primary and most natural food of man.)

There has been recently a tremendous to-do made over enlisting women for work in war plants, but it would appear on this important evidence that the majority of the women in this country are in no shape, physically speaking, to undergo the hardships of a restricted war economy, or enter upon hard physical work, not to mention the added problems affecting

health involved in coping with inadequate housing and restaurant facilities that are well known to prevail in many war plant areas.

The clue to one of the causes of shortages was suggested by some anonymous war-plant worker on a trolley car on his way to his job, who said to his fellow worker, "Well, I see they are going to *control* something else. If they would just quit *controlling* and let things alone, maybe we wouldn't have so many shortages." He might have added if there were fewer vague and threatening scare speeches in press releases out of D.C. explaining how terribly we are going to suffer from this and that shortage, or warning against some new difficulties unknown and undefined, and what a state of havoc, hunger, and want American consumers will be living in, beginning almost any minute, there would be fewer rushes to buy while supplies of goods and other necessities are still to be found. The solution for shortages is first a definite cessation of all scare-talk and scare-releases by bureaucrats, and above all *increased production*, beginning right now, of every possible necessary consumer product. That is such a simple explanation and remedy that it doesn't take a college Ph.D. to figure it out, and adopt it as a national policy. Moreover, it would have poor publicity value for bureaucrats competing for space in the headlines

of Monday morning's papers.

There is a child's fairy tale about three shrewd weavers of cloth who sold the king of a certain mythical country on the idea that they could make the most beautiful cloth ever used in kingly robes. It was a magical cloth which was invisible to any but the honest, truthful, and good person. The king, intrigued by the idea, employed them on the spot, and they went through the motions of making cloth, cutting it, sewing it, and trying it on the king. Turning to the courtiers, they asked whether they did not think the gorgeous new cloth suited His Majesty's regal presence. Afraid to admit that they were neither good nor wise, they were all lavish in their praise. This state of affairs went on for sometime, and the weavers collected a princely living until one day while watching a parade, a little boy turned to his mother and said, "But Mama, the King has no clothes on."

Sooner or later it may dawn on even the consumer who gives little thought to the cosmic problems of the war-administration and planning experts that many things being done in the name of winning the war are no more real than the king's clothing in what they have to contribute to the war effort—that they tend not toward victory but toward discouragement, needless anxiety and frustration—even toward defeat.

Ways to Obtain Additional Heat

(Continued from page 11)

as to the wise course to follow. It is to be hoped that as the situation becomes more difficult and pressing, the rationing authorities may decide to apply good sense and consideration for the rights of consumers along with their present tendency to look at the whole matter in a strictly verbal and legalistic sense remote from house-heating realities. At the present writing, the authorities seem to evidence a notable lack of consciousness of how cold and conducive to ill health, inefficiency, and discouragement an unheated or serious

ly underheated house can be.

Pipeless Furnaces

Another method of providing

Camera Testing Service

The physicist who was carrying on tests of camera shutters, lenses, and focusing scales, announced in CR BULLETIN for November 1940, and in the 1941 ACB, having gone into research work connected with the war, has asked us to announce that he can no longer continue the tests.

an auxiliary heat supply is to install a pipeless warm air furnace. Such furnaces are relatively inexpensive compared with other complete heating systems, are relatively easy and quick to install, and do not require highly skilled or scarce labor. They do, however, require a hole to be cut in the floor for the installation of the hot-air register, also for the cold-air return (the latter is often a part of the hot-air register). Present prices for pipeless furnaces run from about \$125 to \$200.



Sewing Thread—A Small But Important Item for Successful Home Sewing

Now that home sewing is experiencing such a tremendous revival, it is important that all budding dressmakers keep in mind that a dress can be ruined by poor thread. Even a well-made attractive dress may be cheapened if its seams are sewn with off-color thread, and a wash dress may be ruined if the colored thread with which it is sewn runs or comes off against another portion of the garment.

First of all, it is important to select thread according to the use to which it is to be put. Six-cord cotton thread is the type most used. The size should be chosen to suit the type of fabric with which you plan to work.

To aid in selection, sewing machine manufacturers' instruction books usually include a table showing cotton, silk, and linen thread sizes, corresponding to various sewing-machine needle sizes for different types and weights of fabric to be sewn.

For cotton prints, percale, gingham, lightweight woolens, and silks, sizes 50, 60, and 70 are commonly used. On lighter fabrics, such as voiles and dimities, use 80 and 90 thread, and on organdy, chiffon, sheer cotton and silk fabrics, you may use a very fine thread size which is 100. The coarser thread sizes may be used on drapery material, bed ticking, denim, and similar fabrics.

For colored fabrics, mercerized sewing thread which comes in sizes 50 and 70 is used. Since mercerized thread is not so tightly twisted as plain cotton, it is weaker and tends to fray more easily. It is important that thread should be colorfast to washing. Nothing is more annoying than to have colored thread run or fade and spoil the appearance of the garment, or come off on another garment in the wash.

Silk and nylon threads are the strongest for stitching seams in



Reading from top to bottom:

1. A typical three-cord nylon thread. Very smooth and even.
2. Brooks (Kresge) Three Cord, No. 60, cotton thread. Mostly smooth, but note bulge or enlargement in diameter toward the right end.
3. Wards Six Cord, No. 60, cotton. Note small amount of loose or free fibers.
4. Crest Six Cord, No. 50, cotton. Fairly fuzzy and somewhat uneven.
5. A.C.E., No. 50, mercerized cotton. Definitely fuzzy and uneven in diameter.
6. Clarks O.N.T. Six Cord, No. 60, cotton. Notably fuzzy and uneven.

These differences in smoothness and evenness illustrated can be easily noted by a low-powered magnifier, or even by the naked eye, if the thread is held against a proper, rather dark, background, fairly well but not too brightly illuminated. Probably for most users of thread, smoothness and evenness of finish are not of particular importance. For high-speed machine sewing, a smooth, even thread will no doubt give the least trouble with breakage.

silk, rayon, and woolen garments. The use of nylon thread involves some possibility of difficulty in the cleaning and care of the garment, for nylon cannot stand nearly so hot an iron as cotton, and there is danger of spoiling or melting the thread if the iron is carelessly used by someone who does not know that nylon has been used in the sewing.

As a rule, it is wise to select a thread which is slightly darker in color than the fabric on which it is to be used. This and other excellent advice comes from a little pamphlet on Sewing Equipment, by Alice Sundquist, Extension Circular 282 (free), State College of Washington, Pullman, Wash.

In the days when a great deal of clothing was made at home,

the home seamstress undoubtedly had an expert knowledge of just what makes of thread were best fitted for her purposes. In recent years, however, thread has mostly been just another item in the home repair kit for sewing on an occasional button or snap fastener. Now thread is an important feature of five-and-ten-cent stores, and department stores have large displays in evidence. Random samples were purchased by CR for making a check of colorfastness, both to washing and sunlight, shrinkage, and tensile strength. Cotton threads were also compared with nylon, a comparative newcomer to the sewing field. None of the colored threads showed significant fading in sunlight when tested in the Fade-ometer for the

equivalent of 57 hours of summer sunlight in the latitude of Washington, D.C., or Kansas City, Missouri.

Threads listed are cotton unless otherwise indicated. When a notation of "no shrinkage" appears, it means that the shrinkage in a soaking, washing, and ironing test was either negligible or barely noticeable. To facilitate quick comparison of prices, the price per 100 yards is given in each case *in parentheses* after the price per spool. Ratings are cr42.

White

A. Recommended

J. & P. Coats "Boilfast," Mercerized (J. P. Coats, Inc., Pawtucket, R.I.; Montgomery Ward's No. 16-2030) Size 50. 100 yd. No shrinkage. Tensile strength good. 4-1/2c (4.5).

B. Intermediate

A. C. E. Mercerized (Sears-Roe-buck's No. 25-5868) Size 50. 100 yd. No shrinkage. Tensile strength fair. 4-1/6c (4.2).

Crest Six Cord (Sears-Roe-buck's No. 25-5885) Size 50. 300 yd. Shrinkage approximately 1%. Tensile strength fair. 8-2/3c (2.9).

J. & P. Coats Six Cord (Montgomery Ward's No. 16-2001) Size 60. 125 yd. Shrinkage approximately 1%. Tensile strength fair and somewhat better than black of same brand. 6-1/2c (5.2).

Ward's Six Cord (Montgomery Ward's No. 16-2016) Size 60. 150 yd. Shrinkage approximately 1%. Tensile strength fair. 4-1/2c (3).

Brooks Three Cord (Jonas Brook & Bros., Inc.; sold by S. S. Kresge stores) Size 60. 100 yd. Shrinkage approximately 1%. Tensile strength fair. 2-1/2c (2.5).

Heminway and Bartlett Nylon, "For all sewing needs" (Belding-Heminway-Corticelli Co., 119 W. 40, New York City) Size 56-3. 50 yd. Shrinkage approximately 1%. Tensile strength fair. 5c (10).

Monarch Mercerized (Gudebrod Bros. Silk Co., Inc., 12 and Market, Philadelphia) Size not shown. 50 yd. No shrinkage. Tensile strength fair. 2-1/2c (5).

C. Not Recommended

Belding Corticelli Nylon (Belding-Heminway-Corticelli Co.) Size 56-3. 50 yd. Shrinkage approxi-

mately 3 1/2%. Tensile strength fair. Spool carried instruction "Press with warm iron only." 5c (10).

Clark's O. N. T. Six Cord (Clark Thread Co., Clark and Ogden St., Newark, N.J.; Montgomery Ward's No. 16-2011) Size 60. 125 yd. Shrinkage less than 1%. Tensile strength poor. 4-1/2c (3.6).

Clover Three Cord (Purchased in



An attractive suit will look shabby when worn a second year because of fading of the thread on pocket stitching and buttonholes.

F. W. Woolworth stores) Size 60. 150 yd. One sample showed no shrinkage and poor tensile strength. 2-1/2c (1.7). The second sample showed less than 1% shrinkage and poor tensile strength. 125 yd. 5c (4).

Red

A. Recommended

A. C. E. Mercerized (Sears-Roe-buck's No. 25-5868) Size 50. 100 yd. Color 847. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 4-1/6c (4.2).

B. Intermediate

Heminway and Bartlett Nylon, "For all sewing needs." Size 56-3. 50 yd. Color 607. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 5c (10).

J. & P. Coats, "Boilfast," Mercerized (Montgomery Ward's No. 16-2030) Size 50. 100 yd. Color 128. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 4-1/2c (4.5).

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Monarch Fast Colors, Mercerized. No size given. 50 yd. Color 326. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 2-1/2c (5).

C. Not Recommended

Belding Corticelli Nylon. Size 56-3. 50 yd. Color 4120. Color ran badly in washing. Shrinkage approximately 1%. Tensile strength fair. 5c (10).

Monarch Fast Colors, Mercerized. No size given. 50 yd. Color 324. Color ran a little in washing. No apparent shrinkage. Tensile strength poor. 2-1/2c (5).

Blue (and Purple Shades)

A. Recommended

A. C. E. Mercerized (Sears-Roe-buck's No. 25-5868) Size 50. 100 yd. Color 773. Color did not run in washing. Shrinkage approximately 1%. Tensile strength good. 4-1/6c (4.2).

B. Intermediate

A. C. E. Mercerized (Sears-Roe-buck's No. 25-5868) Size 50. 100 yd. Color 722. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 4-1/6c (4.2).

Belding Corticelli Nylon. Size 56-3. 50 yd. Color 6235. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. Carried instruction "Press with warm iron only." 5c (10).

Heminway and Bartlett Nylon, "For all sewing needs." Size 56-3. 50 yd. Color 555. Color did not run in washing. Shrinkage approximately 1%. Tensile strength fair. 5c (10).

J. & P. Coats, "Boilfast," Mercerized (Montgomery Ward's No. 16-2030) Size 50. 100 yd. Color 4-B. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 4-1/2c (4.5).

Lily, "Boil Proof," Mercerized (Lily Mills Co., Shelby, N.C.) Size 50. 100 yd. Color 660. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 2-1/2c (2.5).

Monarch Fast Colors, Mercerized. No size given. 50 yd. Color 281. Color did not run in washing. Shrinkage approximately 1%. Tensile strength fair. 2-1/2c (5).

Monarch Fast Colors, Mercerized. No size given. 50 yd. Color 474. Color did not run in washing. No

shrinkage. Tensile strength fair. 2-1/2c (5).

Green

A. Recommended

A. C. E. Mercerized (Sears-Roe-buck's No. 25-5868) Size 50. 100 yd. Color 761. Color did not run in washing. No shrinkage. Tensile strength good. 4-1/6c (4.2). *Monarch* Fast Colors, Mercerized. No size given. 50 yd. Color 356. Color did not run in washing. No shrinkage. Tensile strength good. 2-1/2c (5).

B. Intermediate

Lily, "Boil Proof," Mercerized. Size 50. 100 yd. Color 600. Color did not run in washing. Shrinkage less than 1%. Tensile strength fair. 2-1/2c (2.5).

C. Not Recommended

Belding Corticelli Nylon. Size 56-3. 50 yd. Color 9130. Color did not

run in washing. Shrinkage approximately 2%. Tensile strength fair. 5c (10).

J. & P. Coats, "Boilfast" Mercerized (Montgomery Ward's No. 16-2030) Size 50. 100 yd. Color 62. Color did not run in washing. Shrinkage approximately 1%. Tensile strength poor. 4-1/2c (4.5). *Monarch* Fast Colors, Mercerized. No size given. 50 yd. Color 358. Color ran slightly in washing. Shrinkage less than 1%. Tensile strength fair. 2-1/2c (5).

Black

A. Recommended

A. C. E. Mercerized. (Sears-Roe-buck's No. 25-5868) Size 50. 100 yd. Color did not run in washing. No shrinkage. Tensile strength good. 4-1/6c (4.2).

B. Intermediate

A. C. E. Six Cord (Sears-Roe-buck's No. 25-5885) Size 50. 300 yd.

Color ran very slightly at one point in washing. Shrinkage less than 1%. Tensile strength fair. 8-2/3c (2.9).

Clark's O. N. T. Six Cord (Montgomery Ward's No. 16-2011) Size 60. 125 yd. Color ran slightly. No shrinkage. Tensile strength fair. 4-1/2c (3.6).

J. & P. Coats Six Cord (Montgomery Ward's No. 16-2001) Size 60. 125 yd. Color ran very slightly at one point in washing. Shrinkage approximately 1%. Tensile strength poor. 6-1/2c (5.2).

Ward's Six Cord (Montgomery Ward's No. 16-2016) Size 60. 150 yd. Color ran slightly. Shrinkage approximately 1%. Tensile strength fair. 4-1/2c (3).

C. Not Recommended

Clover Three Cord. Size 60. 100 yd. Color ran badly in washing; turned blue. Shrinkage approximately 1%. Tensile strength poor. 5c (5).

Corrections to Consumers' Research Bulletin Annual Cumulative Number, 1942-1943

Meat, Poultry, and Sea Food Col. 19-20

Two of the 4 grades of meat below U.S. Good are not those in force at present. The 7 grades of meat now official are as follows: U.S. Prime, U.S. Choice, U.S. Good, U.S. Commercial, U.S. Utility, U.S. Cutter, and U.S. Canner.

References on Foods Col. 154

Under reference 23, delete mention of Massachusetts Department of Public Health, Boston, whose bulletin, "The Commonwealth," has been discontinued during the war emergency as a

means to economy and saving of paper.

Phonograph Records Col. 204

Under "Twelve Recommended Album Sets" the Tschaikowsky B Minor Symphony, No. 6, listing should be *Victor* Set 553, not 513.

Recommended Phonograph Records Col. 207

Insert a heading "Vocal" between Schumann Quintet and Brahms Song Society, three entries above the bottom of the column.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, OF Consumers' Research Bulletin published monthly except July and August at Washington, New Jersey, for September 1941-June 1942—State of New Jersey, County of Warren ss. Before me, a Notary Public in and for the State and county aforesaid, personally appeared F. J. Schlink, who, having been duly sworn according to law, deposes and says that he is the editor of the Consumers' Research Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit: 1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Consumers' Research, Inc., Washington, New Jersey; Editor, F. J. Schlink, Washington, New Jersey. 2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Consumers' Research, Inc., a non-profit corporation, not a business enterprise, not operated for profit, Washington, New Jersey. Stock—none. 3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None. 4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as aforesaid by him. F. J. Schlink. Sworn to and subscribed before me this 25th day of September 1942. Reuben D. Stevens. (My commission expires June 23, 1943.)

Ratings of Motion Pictures

 This section aims to give critical consumers a digest of opinion from a number of reviews, ranging from the motion picture trade press to Parents' Magazine which rates motion pictures not only on their quality as entertainment, but on their suitability in various aspects for children.

It should be emphasized that the motion picture ratings which follow do not represent the judgment of a single person but are based on an analysis of the reviews appearing in some 21 different periodicals. (See June 1942 issue for list.)

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), and C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

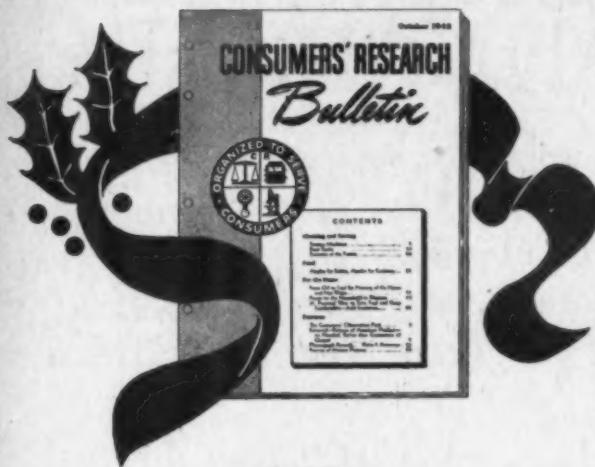
adv—adventure	mel—melodrama
biog—biography	mus—musical
car—cartoon	mys—mystery
com—comedy	nov—dramatization of a novel
cri—crime and capture of criminals	rom—romance
doc—documentary	soc—social-problem drama
dr—drama	trav—travelogue
fan—fantasy	war—dealing with the lives of people in wartime
hist—founded on historical incident	wes—western

A	B	C	
—	4	4	About Face..... war-com AYC
—	9	2	Across the Pacific..... war-mel A
—	10	6	Adventures of Martin Eden, The..... dr A
—	—	—	Affairs of Martha (see "Once Upon a Thursday").....
—	6	6	A-Haunting We Will Go..... cri-com AYC
1	9	—	Apache Trail..... mus-wes AYC
—	7	6	Are Husbands Necessary?..... com A
—	6	3	Atlantic Convoy..... war-mel AYC
—	4	2	Baby Face Morgan..... cri-com A
—	3	—	Bad Men of the Hills..... mus-wes AYC
13	2	—	Bambi..... car AYC
—	3	—	Battle Cry of China..... doc AY
—	4	—	Battle of Midway..... doc AY
—	2	1	Bells of Capistrano..... mus-wes AYC
—	5	5	Berlin Correspondent..... war-dr A
—	10	2	Between Us Girls..... com AYC
—	7	4	Beyond the Blue Horizon..... mus-adv A
—	4	5	Big Shot, The..... cri-mel A
—	11	1	Big Street, The..... dr A
—	2	1	Billy the Kid Trapped..... wes AYC
—	3	2	Blondie for Victory..... war-com AYC
—	3	4	Bombe Over Burma..... war-mel A
—	3	1	Boss of Hangtown Mesa..... mus-wes AYC
—	3	—	Boothill Bandits..... wes AYC
—	8	7	Born to Sing..... mus-com AYC
1	11	3	Broadway..... mus-mys-mel A
—	2	6	Busses Roar..... war-mel A
—	13	3	Butch Minds the Baby..... cri-com A
—	3	3	Cairo..... war-mus-mel AYC
—	5	6	Calling Dr. Gillespie..... dr A
—	5	—	Call of the Canyon..... mus-wes AYC
—	3	5	Careful, Soft Shoulders..... war-mel A
—	3	—	City of Silent Men..... mel AY
—	2	4	Continental Express, The..... war-mel A
—	3	7	Corpse Vanishes, The..... mys-mel A
—	4	2	Counter Espionage..... war-mys AYC
—	13	2	Crossroads..... mys A
—	2	2	Cyclone Kid..... wes AYC

A	B	C	
—	—	6	Danger in the Pacific..... mel AY
—	3	—	Deep in the Heart of Texas..... mus-wes AYC
—	3	6	Desperate Chance for Ellery Queen, A mys A
—	7	3	Desperate Journey..... war-mel AYC
—	3	2	Destination Unknown..... war-mel A
—	4	—	Devil's Trail, The..... mus-wes AYC
—	3	3	Down Texas Way..... wes AY
—	6	3	Dr. Broadway..... mel A
—	2	5	Drums of the Congo..... mus-war-dr-mel A
2	9	2	Eagle Squadron..... war-mel A
—	5	2	Enemy Agents Meet..... war-mel AYC
—	2	6	Ellery Queen..... cri-dr A
—	5	4	Escape from Crime..... war-mel AYC
—	3	—	Escape from Hong Kong..... cri-mel A
—	4	—	Eyes of the Underworld..... war-mys AYC
—	5	4	Falcon Takes Over, The..... mys-mel A
—	2	1	Falcon's Brother, The..... war-mys A
—	11	5	Fingers at the Window..... cri-mel A
—	5	5	Flight Lieutenant..... war-mel A
—	4	—	Flying Fortress..... war-mel A
3	3	—	Flying Tigers..... war-mel AYC
—	1	4	Flying With Music..... mus-com A
1	12	2	Footlight Serenade..... mus-com A
1	4	—	For Me and My Gal..... war-mus-com AYC
—	1	3	Foreign Agent..... war-mus-mel A
1	3	—	Forest Rangers, The..... mel AY
—	1	4	Four Flights to Love..... dr A
—	7	3	Friendly Enemies..... war-dr AYC
—	4	4	'Frisco Lil..... dr AYC
1	6	6	Gay Sisters, The..... nov A
—	3	—	George Washington Slept Here..... com AYC
—	4	2	Get Hep to Love..... mus-dr AYC
—	2	6	Girl from Alaska, The..... mel AYC
—	2	5	Girl Trouble..... com A
—	4	3	Give Out, Sisters..... mus-com A
1	1	3	Glass Key, The..... cri-mel A
—	7	1	Grand Central Murder..... cri-mys A
—	11	7	Great Man's Lady, The..... rom-dr A
—	3	2	Halfway to Shanghai..... war-mel A
—	3	1	Hard Way, The..... mus-dr A
—	6	2	Hay Foot..... mus-war-com AYC
—	3	5	Hello Annapolis..... com AYC
—	12	3	Hellzapoppin..... mus-com A
—	1	3	Henry Aldrich, Editor..... mel AYC
—	2	13	Her Cardboard Lover..... com A
—	3	6	Here We Go Again..... com AYC
—	4	3	Hi, Neighbor..... mus-com A
—	2	3	Hidden Hand, The..... mys-com A
—	6	4	Highways by Night..... cri-com A
—	2	4	Hillbilly Blitzkrieg..... war-com AYC
3	13	—	Holiday Inn..... mus-com AYC
—	4	1	Home in Wyomin'..... mus-wes AYC
—	9	3	Iceland..... mus-com A
—	4	6	I Live on Danger..... cri A
—	7	9	I Married an Angel..... mus-com A
—	3	4	In Old California..... wes AYC
—	9	7	In This Our Life..... nov A
4	13	1	Intruders, The..... war-dr AYC
—	6	5	Invisible Agent..... war-mel A
—	4	2	Isle of Missing Men..... war-mel A
—	9	3	It Happened in Flatbush..... biog AYC
—	2	6	Jackass Mail..... com AYC
—	2	3	Jesse James, Jr..... wes AYC
—	4	2	Joan of Ozark..... mus-war-com AYC
—	5	3	Journey Into Fear..... war-mel A
5	7	8	Jungle Book, The..... fan AYC
—	5	2	Just Off Broadway..... cri-dr A
1	9	1	Kid Glove Killer..... cri-mel AYC
—	2	1	King of the Stallions..... wes AYC
—	7	—	Klondike Fury..... mel A



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It's Time Right Now to Think About Christmas

Christmas wrappings, gift cards, and Christmas decorations have already made their appearance in the five-and-ten's and in department stores. In previous years people waited until after Thanksgiving to start making out their Christmas list, but this year things are different.

GIFTS FOR THE BOYS overseas were to have been shipped by October 31. When stocks of items such as metal toys, sleds and velocipedes, certain kinds of clothing, and important classes of photographic goods are exhausted, no more will be available. With these facts in mind, forehanded people are doing their shopping extra-early this year.

ALTHOUGH MILLIONS who work in war industries are receiving fatter pay envelopes than heretofore, many other people find that their gross incomes are the same; for millions more, incomes are severely cut by closing down or shrinkage of business volume in many lines of trade, by drastic increases in taxes and soaring commodity prices. For such friends, we suggest a year or a two-year subscription to Consumers' Research. This year of all years your friends will welcome its helpful, economical, money-saving advice. When you give Consumers' Research for Christmas, you spend wisely and well. You help not only to save money in buying things (and plenty of things are still being bought), but you help to avoid unnecessary or wasteful purchases that dissipate the nation's vital assets of materials and skilled labor.

Bear in mind that Consumers' Research has two subscriptions. For private individuals, there is the full subscription at \$3 a year, including the ANNUAL CUMULATIVE BULLETIN, a most important aid to the family purchasing agent, which enables her to have at her fingertips readily accessible information to evaluate the newer fabrics and household supplies, the latest advice on vitamins or diet, what to eat to keep strong and healthy, what foods contain the essential vitamins, as well as hundreds of listings of canned goods rated as A-Recommended, B-Intermedi-

ate, or C-Not Recommended. The information is brought up to date by the BULLETINS which appear monthly, except during July and August.

FOR LIBRARIES, schools, study groups, and others, there is the limited subscription which consists of BULLETINS mailed monthly (except July and August, when no BULLETINS are issued, and September when the ANNUAL CUMULATIVE BULLETIN is the big issue of the month). Many libraries and schools like to enter their subscriptions for the volume year October through June. Subscription for the nine issues is \$2. No special subscription blank is needed for this. On the previous page, however, you will find a handy form for the full subscription, including the ANNUAL CUMULATIVE BULLETIN.

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 The home economics teacher
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 Your grocer, to help him with important information about foods

A	B	C	A	B	C					
—	8	5	Lady in a Jam.....	com A	—	11	2	Ship Ahoy.....	war-mus-com A	
—	4	3	Lady in Distress.....	mel A	—	7	4	Ships with Wings.....	war-dr AY	
1	8	7	Lady Is Willing, The.....	com A	—	2	2	Silver Bullet, The.....	wes AYC	
—	3	3	Let's Get Tough.....	war-com A	—	3	1	Sin Town.....	mel A	
—	5	6	Little Tokyo, U. S. A.....	war-mel AYC	—	6	—	Smart Alecks.....	cri-com A	
—	6	7	Loves of Edgar Allan Poe.....	dr AY	—	2	1	Sombrero Kid, The.....	wes A	
—	—	3	Lure of the Islands.....	war-mel A	—	11	4	Somewhere I'll Find You.....	war-mel A	
—	5	4	Mad Martindales, The.....	com AYC	—	2	3	Sons of the Pioneers.....	wes AYC	
—	1	4	Mad Monsters, The.....	mel A	—	5	1	So's Your Aunt Emma (also titled "Meet the Mob").....	com AY	
1	11	5	Magnificent Ambersons, The.....	nov A	—	3	1	Springtime in the Rockies.....	mus-com AYC	
—	10	2	Magnificent Dope, The.....	com AYC	—	4	—	Stardust on the Sage.....	mus-wes AYC	
—	9	4	Maisie Gets Her Man.....	com A	—	3	—	Strangler, The.....	mel A	
3	10	—	Major and the Minor, The.....	com A	—	3	1	Street of Chance.....	mys-nov AY	
—	3	3	Manilla Calling.....	war-dr A	—	5	3	Strictly in the Groove.....	mus-com AYC	
—	1	3	Man in the Trunk, The.....	cri-mys A	—	5	2	Submarine Raider.....	war-dr AYC	
—	1	2	Man's World, A.....	war-mel A	—	10	4	Sulicide Squadron.....	war-mel AY	
—	9	1	Meet the Stewarts.....	mel A	—	6	—	Sunset on the Desert.....	mus-wes AYC	
—	11	2	Men of Texas.....	mel AYC	—	3	—	Sunset Serenade.....	mus-wes AYC	
—	4	5	Mexican Spitfire's Elephant.....	com A	—	4	6	Sweater Girl.....	mus-mys A	
—	5	9	Miss Annie Rooney.....	com AYC	—	3	3	Sweetheart of the Fleet.....	mus-com AY	
1	1	1	Moon and Sixpence, The.....	nov A	—	7	8	Syncopation.....	mus-dr AY	
—	5	3	Moonlight Masquerade.....	rom A	—	—	—	—	—	
6	10	3	Moontide.....	dr A	3	6	1	Take a Letter, Darling.....	com A	
13	4	—	Mrs. Miniver.....	war-dr-nov AY	1	10	4	Tales of Manhattan.....	dr A	
—	1	3	Mrs. Wiggs of the Cabbage Patch.....	dr AYC	—	14	—	Talk of the Town, The.....	com A	
—	6	6	My Favorite Spy.....	war-mel AY	—	7	5	Tarzan's New York Adventure.....	mel AYC	
2	4	—	My Sister Eileen.....	com A	—	12	3	Ten Gentlemen from West Point.....	hist-dr AYC	
—	3	1	Native Land.....	doc A	—	3	—	Texas to Bataan.....	mus-wes AYC	
—	1	2	Nazi Spy Ring.....	war-mel AYC	—	1	3	Texas Trouble Shooters.....	wes AYC	
—	6	7	Night Before the Divorce, The.....	dr A	—	8	4	They All Kissed the Bride.....	com A	
—	6	1	Night for Crime, A.....	mys A	—	2	3	They Raid By Night.....	war-dr AYC	
—	5	3	Night in New Orleans, A.....	mys A	—	4	12	This Above All.....	war-rom-nov A	
—	8	4	No Hands on the Clock.....	mys-nov A	—	2	15	This Gun for Hire.....	cri-war-mel A	
—	5	—	North of the Rockies.....	mus-wes AYC	—	5	5	Through Different Eyes.....	cri-mys A	
—	4	3	Not A Ladies Man.....	dr A	—	4	—	Timber.....	war-mel AYC	
2	5	1	Now, Voyager.....	dr A	—	4	7	Tish.....	com A	
—	4	1	Old Homestead, The.....	mus-cri-com AYC	1	8	—	Tombstone.....	wes AYC	
—	4	—	Omaha Trail, The.....	wes AYC	—	1	4	Tomorrow We Live.....	cri-mel A	
1	6	1	Once Upon a Thursday.....	com A	—	3	3	Top Sergeant.....	war-mel AYC	
1	5	1	One of Our Aircraft Is Missing.....	war-mel AY	4	13	—	Tortilla Flat.....	rom-com A	
—	7	2	One Thrilling Night.....	com A	—	1	6	Tough As They Come.....	mel A	
—	9	—	On the Sunny Side.....	war-com AYC	—	1	3	Tower of Terror.....	war-mel A	
—	7	5	Orchestra Wives.....	mus-com A	—	8	3	True to the Army.....	mus-com AYC	
—	3	—	Overland to Deadwood.....	wes AYC	—	4	3	Undercover Man.....	wes AY	
—	5	6	Pacific Rendezvous.....	war-mel AYC	—	6	6	Unexpected Uncle.....	com AY	
—	10	3	Panama Hattie.....	war-mus-com A	1	11	1	Unfinished Business.....	com AY	
—	4	3	Parachute Nurse.....	war-mel A	—	6	3	United We Stand.....	doc AYC	
—	8	6	Pardon My Sarong.....	com A	—	1	5	Unseen Enemy.....	war-mel AYC	
1	4	—	Phantom Killer.....	mys A	—	10	4	Valley of the Sun.....	wes AYC	
4	13	—	Pied Piper, The.....	war-mel AYC	—	3	1	Vengeance of the West.....	wes A	
—	2	8	Pierre of the Plains.....	dr AYC	5	8	2	Wake Island.....	war-dr AYC	
—	8	2	Postman Didn't Ring, The.....	dr AYC	—	8	3	War Against Mrs. Hadley, The.....	war-dr AYC	
10	7	—	Pride of the Yankees, The.....	biog AYC	—	4	13	We Were Dancing.....	com A	
—	7	4	Priorities on Parade.....	mus-com AYC	—	5	1	West of Tombstone.....	mus-wes AYC	
—	3	4	Prisoner of Japan.....	war-mel AY	—	4	1	Westward Ho.....	wes AYC	
—	2	5	Private Buckaroo.....	war-mus-com AYC	—	6	7	What's Cookin'.....	mus-com AYC	
3	11	3	Reap the Wild Wind.....	mel AYC	—	4	7	Whispering Ghosts.....	com AYC	
—	6	5	Remember Pearl Harbor.....	war-mel A	—	5	—	White Cargo.....	dr A	
—	4	2	Riders of the Northland.....	mus-war-wes AYC	—	9	4	Wife Takes A Flier, The.....	war-com A	
—	1	3	Riders of the West.....	wes AY	—	1	4	Wildcat.....	mel A	
3	2	—	Road to Morocco.....	mus-com AY	—	2	6	2	Wings and the Woman.....	biog-war-dr A
—	5	1	Romance on the Range.....	mus-wes AYC	—	7	3	Wings for the Eagle.....	war-dr AYC	
—	4	2	Rubber Racketeers.....	mel A	—	8	1	World at War.....	war-doc A	
—	2	5	Sabotage Squad.....	war-mel AYC	—	7	2	Yank at Eton, A.....	com AYC	
2	11	3	Saboteur.....	war-mel A	—	3	3	Yank in Libya, A.....	war-mel A	
—	2	4	Secret Enemies.....	war-mel A	12	4	—	Yankee Doodle Dandy.....	mus-biog AYC	
1	2	—	Secrets of a Co-ed.....	mus-mel A	—	6	2	Yokel Boy.....	mus-com A	
—	3	3	Secrets of the Lone Wolf.....	cri AY	—	2	2	You Can't Escape Forever.....	cri-mel AY	
3	5	—	Seven Sweethearts.....	mus-com AYC	—	1	3	Young Mr. Pitt, The.....	biog AY	
—	3	4	She's in the Army Now.....	war-com A	—	1	3	You're Telling Me.....	com A	
—	2	3	Shepherd of the Ozarks.....	mus-war-mel AYC	—	3	—	Youth on Parade.....	mus-com AY	
—	5	—	Sherlock Holmes and The Voice of Terror.....	war-mys-dr AY	—	1	4	Yukon Patrol, The.....	war-mel AYC	



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